

2971

LONDON

PRINTED BY SPOTTISWOODE AND CO.

NEW-STREET SQUARE



FOREST CREATURES.

BY

CHARLES BONER,

AUTHOR OF "CHAMOIS-HUNTING IN THE MOUNTAINS OF BAVARIA," ETC. ETC.

"The gay green wood ! 'Tis a lovely world,
With beauty that's all its own ;
And pleasant it is in summer time
To roam through that world alone."

VERSE. *Ballad of the Royal Hunt in the
Forest of Winchester.*

LONDON :

LONGMAN, GREEN, LONGMAN, AND ROBERTS.

1861.

Q6
112
B69
1861
SCHMIDT

TO
AN ARDENT SPORTSMAN,
UNTIRING IN THE PURSUIT OF THE RED DEER AND THE CHAMOIS,
BUT EQUALLY UNTIRING IN PURSUING WHATEVER MAY BRING
WEAL TO THE MANY,
OR AFFORD HAPPINESS AND PLEASURE TO BUT
A SINGLE ONE :
TO
HIS SERENE HIGHNESS ERNEST,
REIGNING
DUKE OF SAXE-COBURG-GOTHA, K.G.
&c. &c. &c.
IN MOST PLEASANT RECOLLECTION OF DAYS PASSED WITH HIM
IN THE FOREST AND ON THE MOUNTAIN,
AND
IN GRATEFUL REMEMBRANCE OF MANY A FAVOUR RECEIVED
THESE PAGES
ARE VERY RESPECTFULLY DEDICATED
BY
THEIR AUTHOR.

Munich: 1861.

130884

590.8

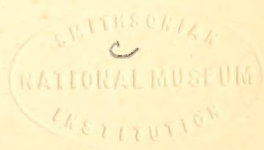
B712

P R E F A C E.

It had long been my intention to give an account of those forest animals with whose habits I was familiar, and which to the greater number of my countrymen would probably be less intimately known. The plan was matured, but its execution deferred till 1859, when "Black Cock" shooting in Bohemia gave the impulse to begin. The papers were called "Chapters on Natural History;" but as I feared such title might lead some to look for more than it was my intention to offer, this was changed for another of less pretension, and which, it is hoped, may raise no greater expectations than will afterwards be realised.

I wish it to be understood that the book is

Boner, C.



wholly without scientific pretension. Its aim is merely *to sketch* the animals themselves, and to touch on some of their more striking peculiarities and instincts ; those, at least, which to me appear most interesting.

Originally the Chamois was included in the list ; but having described him in another work, it seemed unnecessary to do so here.

To two “communications,” made to the Historical Society by Dr. Föringer and Professor von Kobell, I am indebted for some statistics ; but still more for having thence become acquainted with Dr. Landau’s valuable work “Beiträge zur Geschichte der Jagd und der Falknerei in Deutschland,” from which, for my first and third chapters, I have taken some curious information.

CHARLES BONER.

Munich: 1861.



CONTENTS.

THE WILD BOAR	PAGE 1
THE ROE. Part First	25
Part Second. A new Wonder in Natural History	36
THE RED DEER. THE STAG. Part First	49
Part Second	97
THE FALLOW DEER	126
THE CAPERCAILE, OR COCK OF THE WOOD	135
THE BLACK COCK	147
THE GOLDEN EAGLE	161
HOMER A SPORTSMAN	206
HINTS	221

LIST OF ILLUSTRATIONS.

ILLUSTRATIONS (AS SEPARATE PLATES).

THE EAGLE	<i>Frontispiece.</i>
WILD BOARS	<i>to face page</i> 12
ROES	„ 25
SLOTS OF THE STAG	<i>pages</i> 99, 100, 103, 104, 106
FALLOW DEER	„ 126
THE CAPERCAILE	„ 142
BLACK COCK	„ 156

ILLUSTRATIONS IN THE TEXT.

SKULL AND JAWS OF WILD BOAR	PAGE 4
HEAD OF WILD BOAR	18
STAG FREEING ANTLER FROM ITS VELVET COVERING	61
STAG'S ANTLER	71
STAG'S ANTLER. A peculiar Growth	74
SLOTS OF THE STAG	108

FOREST CREATURES.

THE WILD BOAR.

Sus scrofa, *Aper.* *Linn.*

SEE, there he stands, the sturdy, sulky-looking brute; suddenly stopping in his quick dog-trot over the frozen snow! His head is not so much raised upward as that of a stag, or a roe, or a fallow-deer would be if some sound or scent surprised him; it is but little less high than it was before, while the animal was in motion, and, in the whole demeanour of the black bristly creature, there is a stubbornness, and a resolute ill-temper. Nor is the figure, as it stands waiting, enlivened by a bright, expectant, flashing eye, turned towards you and staring with inquiring boldness. There is nothing of that here; for the narrow-slitted eye casts a furtive glance, side-long, covert, and scowling from the corner stealthily. You do not see

the orbit, for he is somewhat far; but you would not do so if he were nearer: and yet he is scanning your form minutely all the while, and trying to make out satisfactorily what you are. Look how motionless he stands! — He does not turn his head a hair's breadth; but as he suddenly stopped so he remains immovable. Had you not seen him before in motion, — had you not seen him come to the spot where he now seems rooted, — you might think the black mass was not alive, and take it for some dark stem, or mound, to which your fancy had given an animal's shape.

Now he gives a sharp whiff, and then an abrupt grunt: up goes his tail, and setting off at his old dog-trot, away he starts right a-head, through the thickly snow-laden pine forest. On yonder ridge he stops again; but he does not look round though you are now behind him. With his head still pointing in the direction it was while hasting forwards, he has suddenly halted; and if you could get near enough would see he was scowling back at you from the very extreme corners of his villanous eyes.

But that is his way: as he halted when hearing something, so he remains, no matter whether the sound was beside or behind him. He stops in a second; and does not stir again, except to continue his way head-foremost. But his sense of hearing is so good, he hardly needs to look round; and, as he stands, an organ

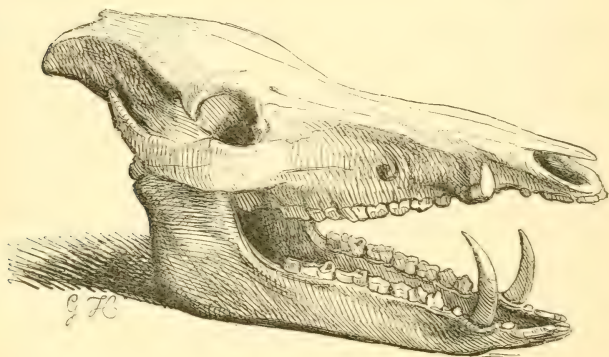
DSI

of exquisite delicacy is aiding him to discover if danger be near, and, if so, what that danger is. He is snuffing the air, and deciding what to do. For his olfactory organs are wonderfully fine; and, coarse brute as you think him, to his susceptible nose your presence brings a pestilential odour. Notwithstanding your morning bath, he finds you taint the air. He snuffs the breeze, and deems it impure and an abomination; and that abomination are you, though more than two hundred yards off.

Yet he is a fine fellow for all that; and well deserves to be classed with the “knightly” beasts, as always has been the case by true lovers of wood-craft and writers on “the noble art of venery.” For he has no lack of courage; and if you choose to face him and to challenge, he will not be backward with a reply. Should he have been tormented by the hunter or his dogs, and escaping them at last meets you upon his way, I would advise you to step aside and let him pass unquestioned; for be sure *he* will not turn. He will be too glad of an opportunity to vent his rage on one of the genus man; and, in passing, with a jerk of his head will rip up your shin, or your thigh, or your body, before you are aware. He will not stop for this; for it is his manner to go straight on: he therefore will never think of turning back, but he dashes forwards, let what may stand in front.

If enraged, the further you keep from him the better. When wounded and unable to move away, he will snort with fury; and if he cannot vent it upon you or some living thing, will dash his tusks in the pine stem next him; and he has been known to do so with such energy that he could not outdraw them, so deeply had they entered. For the tusks are pointed, and often very sharp, the upper edge being whetted by coming in collision with the smaller tusk above, into the bend of which the lower one fits.

In the older boars they are generally of good length, and the white ivory-like weapon curling over the upper



SKULL AND JAWS.

jaw distinguishes the sex at once, and gives the physiognomy sometimes an odd look. The front part, that meant for offensive action, is solid like the tusk of the

elephant ; while, as with that animal also, the root is hollow, and is sunk for nearly half the length of the whole in the strongly-built jaw. Just as a skilful broadswordsmen, with a turn of the wrist merely, inflicts a gash as the blade flies by, so the wild boar by a sudden toss sends his sharp-edged weapon through your flesh and muscles to the very bone. It does not tear ; but it cuts right through whatever it meets with, vein or tendon or artery.

Formerly, when the forests were filled with wild boars, the mishaps were of more frequent occurrence than they are now, and sometimes a horse, sometimes a hunter, without mentioning the hounds, was wounded or maimed.* Then, it is true, they generally were hunted and brought to bay, turning of course to attack their assailants. November 2, 1598, 120 wild boars were killed in one day's hunt in Hesse. On this occasion a young nobleman's thigh was so ripped up by a boar, that it was obliged to be amputated ; yet, notwithstanding, the sufferer died a few days after.

A curious instance is on record, of the fury of the boar when incensed, and his readiness to attack even other animals on such occasions. It occurred in Hesse,

* Hence, in old works on Venery, the hunter of the boar is forewarned to take with him needles, silk, a lancet, and some preparation for stopping the blood, or washing out a wound. If the sportsman escape injury, he still, most probably, will have to act the surgeon to his hounds.

in 1629, in presence of Landgrave George and his attendants. The game being driven to a certain spot, a boar and a stag appeared suddenly at opposite ends of the ground. At sight of each other, they both rushed to the attack; and such was their vehemence that both fell dead; the boar having been mortally goaded by the antlers of the stag, and the boar having ripped up the other's body with his tusks.* And when Landgrave Lewis V., in 1597, wrote to his uncle at Marburg to beg for some dogs, the latter answered that he had himself but few at the moment, nearly all of his having been wounded in the boar-hunts of the preceding season.* It was from such facts as these, the saying became proverbial, "He who wants boars' heads, must risk hounds' heads to get them."

As recently as 1845, on the 7th of November, late in the evening, one of the watchers on the skirts of a wood met a boar of unusual size, and at once set his dogs upon him. But being dark he was not able to help them in their struggle, and two were killed outright, and five others mortally wounded. The boar then attacked the man, ripping up his thigh from end to end. He threw him down, and the courage of a surviving dog alone saved him from further injury. Seizing the boar by the snout, he dragged him away, and pulled him by degrees into some water close by; and though

* Landau. Beiträge zur Geschichte der Jagd in Deutschland.

severely wounded, held him fast till aid was brought. The man's comrades soon came, and each of them was attacked in turn by the boar, which, after three hours' fight, was at last overcome.*

A dog of fiery courage, therefore, is the worst that can be had for a boar chase; for he will surely fall a victim to his daring, and get ripped up from end to end. A wary hound will take good care not to approach within reach of the outstretched neck; but will keep right in front, barking with all his might, while from behind the others fly at his haunches, or seize fast hold of the now somewhat raised ears. The baited wounded animal will stand quietly enough amid his foes, but keeping a sharp look out; and should they close upon him, or grow too unbearably troublesome, one sweep of his formidable head is enough to clear the ground, and leave a fair space around him, for a while at least. On such occasions it is not in his tactics to advance to the attack, or endeavour to rout the enemy; he only receives those who approach too near, and sends them back maimed or gasping. But if, when he has stolen away and is hidden under the coverts of dense under-wood, you should, unaware of his proximity, come upon his lair, he will rush out and leave you a remembrance that will last your life long. He will not return to the attack, or should his rush have thrown you down, stay

* Landau.

to mangle you further ; he is off and away like a shot, but the wound he will have given you in passing is quite enough.

And if, where he cannot escape meeting you, you choose to face him and provoke an attack ; or should you oppose him when made wrathful by a wound, he will at once charge down upon you, even though the two-edged gleaming blade of the long-shafted boar-spear be held towards him, two feet from the ground, so that it may enter his shoulder as he rushes on. And though you grasp it firmly, and you lean your more advanced hand on and against your somewhat bended knee, he may strike the blade sideways with his head and be upon you quick as a sabre-cut. But even if you are cool and collected and steady, and the sharp steel passes between the shoulder-blade and his neck, even then, I say, be careful that his tusks — for his neck is long — do not reach your knee.

On the 12th of December, 1581, just such an accident as I counsel you to guard against happened to Klaus Rantzau, “one of the gentlest pages” of Landgrave William of Hesse, who thus describes the occurrence in a letter to a friend. “We had a right merry day’s sport, having killed 121, and, thank God ! without any mishap, when our page ran from his place to seek his dagger which he had lost. Meanwhile a boar, followed by the dogs, comes towards him ; and he resolves to attack it

with his spear. And although a comrade who was the other side of a ditch called to him to take heed, for that it was an old boar, he did nevertheless proceed; and dropping his spear the boar rushes forward and *receives it on his forehead*. Hereupon the boar knocks it aside, and hews the poor youth with his tusks just above the knee in such a manner, that all the blood-vessels were cut in two, the wound going to the very bone. When the others had come near to him and had spoken a few words, commending him to God, he sighed a few times and gave up the ghost.”*

The tusks of the female are too insignificant to inflict a ripping wound, so she bites, and bites terribly.

She is a good mother, though on occasions she devours her young, and, strangely enough, such unnatural conduct grows epidemic. Hardly has one mother thus trespassed against nature, when others begin to follow her example, and litter after litter is thinned by the like atrocity. To put a stop to this, the only way is to exterminate the evil-doers root and branch, and so end at once the allurements of bad example. †

* Landau.

† Since the above was written, some circumstances have occurred which show that when the wild-boar has once begun the practice of devouring its young, it will continue to do so under any circumstances. Last week (the second week in April 1860), on inquiring of the forester how the wild-boars were thriving, and about the last litters, he told me that a great many had been lost by this unnatural practice having gained unusual ascendancy. As hitherto, it had become contagious.

But generally the female parent fulfils her duties with true maternal care, and leads and watches over her offspring with tenderness and anxious love. Directly she hears one cry, she hastens to the spot. She calls them around her as a hen her chickens if their safety seems threatened; and when danger approaches she sets off with her family scampering after, to lead them where they will be secure. She does not stop till there is no fear of pursuit. She leads the way and hastens on with an occasional grunt, which may indicate displeasure at being disturbed, or an admonition to her family to keep close. When she stops, they stop, and are as still as she. Though such matters must be new

Not only had the mothers been seen to destroy their progeny, but the males also had begun to do so likewise. They would knock down some little sucking-pig, and then bite it, on which others would come to join in the scuffle; the presence of one, as it would seem, exciting the other. The taste of blood appears to whet their appetite for more.

The forester while sitting in the forest and watching their proceedings from his look-out, ready to shoot any evil doer, and so put an end to such unnatural deeds, observed an old boar approach a troop of young pigs, and taking one in his mouth, as a pointer would carry a partridge, trot off with it. As the boar was retreating he fired, and the bullet passed along the ridge of the animal's back, ploughing it up from one end to the other. The next day, while again on the watch, he saw the same boar return to the same spot, and, though severely wounded, seize on another little one with the intention of devouring it. This time, however, a bullet sent him rolling in the dust. On opening the animal the stomach was found filled with the small bones of the young pigs. Indeed, it would seem that when they have once tasted this carnal food, they refuse every other.

to them, and they can know little or nothing of the necessity of caution, the young things stand and listen as though they understood all about it. But onwards their mother leads them with a grunt as a signal for retreat; and she must be far from the spot where danger first menaced, and have reached the shelter of some protecting thicket, before she will stop or let her little ones stray at will.

There is no peril that will daunt her when her young need defence. Her courage then is quite heroic. No matter who the spoiler be, whether man well armed or brute of superior force, she flies at him with a fury which it is difficult to withstand. Nor will steady resistance, or desperate wound, keep her back or make her retreat. Not till her child be safe, or till she herself sink before her foe, does the combat end. For, as to driving her back, you might as well think of making a robbed lioness turn, as to expect her to cede while life remains. And, as was said above, her bite is terrible. She tears out pieces of flesh, and tramples on her fallen adversary. She returns also to the attack, and does not wound in passing and then go on, as the male animal will do. Hence with her it is useless to step aside or get behind a tree, as you would if the boar were to rush upon you; she is not to be evaded thus. When *he* attacks, and there is no other help, you may fling yourself flat on the ground and you are safe; for the

boar cannot wound *down*-wards, but rips *up*-wards only, as he passes and goes on. But she, were you to try such stratagem with her, would turn it to her advantage and your sorrow; for you would never get up again whole and sound; maybe not rise at all. Yet the he and the she-boar, if let alone, will harm no one; on the contrary, they flee at man's approach.

They have good qualities withal, and highly estimable, these bristly, ungainly denizens of the forest. They are a social race, and have a taste for family life. Many families live together, forming thus a little community; and it is surely a good feature in their character that even though so many of the gentler sex are thus brought together, and although conflicting interests are naturally present, there is really no quarrelling. Harmony and good fellowship prevail. It must, however, in justice to other fair, be stated that one chief cause for jealousy and disharmony does not exist here: there are none of the other sex among them to create heart-burnings, fancied slights, rivalry, and discord. The only males that are in such families are too young and insignificant to excite jealousy or spite: they are either the babes and sucklings of the present or the hobberdehoy of the last year: and what the *status* of a hobberdehoy is, we all know and have felt. The old boar is a surly, grumpy fellow; somewhat of a misanthrope, and liking greatly to be alone. The company of the females and the



WILD BOARS.

children annoys him. He strolls about and furrows the ground without a companion; and in the thicket where the undergrowth is densest he makes himself a bed, just large enough, and no more, for his own person; and here he will lie alone, meditating perchance on the perversity of human nature as shown in the invention of gunpowder.

Or, especially if it be warm weather, he will seek out some oozy pool, where there is more mud than water, or a morass; and there, quite covered, except the head, will sit for hours. On leaving such a bath these creatures have a strange appearance: their bristles are clotted with earth and the clayey soil, which, when dry, covers them like armour.

But in speaking of the female animal one feature must not be forgotten, praiseworthy and—though it be said of a wild-boar, yet not said jokingly—really lovable. Should a litter have been deprived of a mother's care, the little orphans are sure to be adopted by another, who leads them about and protects them as though they were her own.

The full-grown male, for another reason, independent of his courage, deserves the appellation which among old German wood-craftsmen has always been assigned him, that of "*ein ritterliches Thier*;" *i. e.* a knightly or valiant beast. Be he wounded never so painfully, he utters no cry. He may snort with rage and with agony,

but no plaint ever escapes him. The females and the younger males form an exception, and when badly hurt their sharp cries may be heard afar.

Wild-boars do not see particularly well, and they trust rather to their hearing and to their sense of smell for protection against attack. They have a fine ear, and the slightest unwonted sound is sufficient to make them stop and listen. But they scent still more finely; and, as a chamois will do, if they come across a spot where a man has recently stood, they will rush off as though he still were present.*

Like all forest-creatures they have their fixed paths, which they always take in moving from one quarter to another. As they go about in troops, the hill-sides have such paths distinctly marked on them, where they are accustomed to pass. Nor do they like changing their wonted route for another. When disturbed and in danger, they will unanimously make for some gap in a paling or hedge, or for a narrow lane or deep hollow, though a great distance off; and they keep to the lines they have marked out for themselves with wonderful pertinacity.

* Having once mounted a tree, the better to watch the movements of the game as it strayed forth from the covert, I perceived a wild-boar coming towards the foot of the oak amid whose branches I was sitting. Directly he neared it he smelt the stem against which my feet had rested in mounting; and, perceiving the taint, was off in a moment, scared, and with all possible haste.

It is amusing enough to watch them when returning to an accustomed path whence they lately had been scared. Remembering their recent fright, they will approach step by step; then stop and peer into the distance; advance again, and halt, and listen; and it is only when no sound or appearance whatever occurs to alarm them, and they are perfectly reassured, that they fearlessly stroll onwards as before.

They will daily return to the same bed which they have made themselves in the wood; and at sunset off they are to the meadows. At night they are in the fields busy among the potatoes and the corn; and as soon as day begins to break through the gloom, back they go at once to the forest, and always at a trot. Acorns are their daintiest food, and to get them they go far. When these are plentiful, the flesh is most palatable; in oak woods, too, these animals fatten best. From October to December they are in prime condition; and a sturdy old boar that will tolerate no sharer of his feast and moreover can enforce his will, soon grows so rotund and portly that he cares little for locomotion; and when he has eaten his fill, lies down near at hand, in order, a few hours later, to begin again.

Such a strong fellow is a thorough egoist. If he have abundance, though he cannot eat all, at least he will try; and should another approach, he faces about to drive off the unbidden guest. He will stand right in

the middle of his food ; and though at last he may only knock it about without eating more, he will not let another have a mouthful. He has no respect for age or sex. His own progeny, his wife or mistress, are the same to him. They have no business where he is, and he will not tolerate them in his immediate neighbourhood. If very obstinate, he soon gives them to understand he will bear their importunities no longer ; and should they not be warned by an angry grunt, he runs after them, and with a few well-applied blows with his tusks sends them yelling away.

The wild boar is to be found in all climates ; but these animals, nevertheless, like warmth, and in winter are glad to resort to the sunny side of the hill, or a sheltered valley. Marshy spots are their favourite resort, and in the reedy coverts of the delta of the Nile and the jungles of India they herd in great numbers.

In Germany, where the forests were so extensive, and the love of the chase so characteristic of its princes, game was abundant in all parts of the country. From the "Game Book" kept by Duke William IV., anno Domini 1545, still preserved in the archives of Upper Bavaria *, we learn that eighty-four wild boars were killed between Easter and the last day of the carnival. (Von Ostern an, biss auf den leczten Faschanng tag.)

* Communicated by Professor Von Kobell.

In the "Diary" kept by Duke Albert V., 1555-1579*, besides all other sorts of game, 51 boars were shot in one year, in 1576, 107, and in 1577, 104, "all with his own hand."

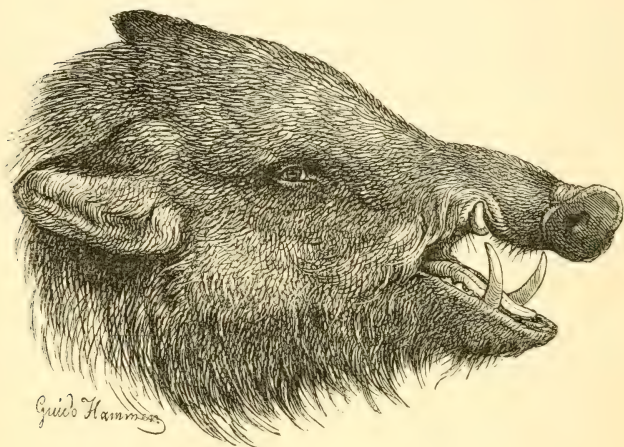
But it was in Hesse that the wild boar was found in greatest abundance; so much so, indeed, that when we consider the damage these animals do to the fields, it is almost inconceivable how husbandry could be carried on. In the year 1556 the Landgrave Philip had killed, up to November 30th, 726 wild boars, and of these sixty-one were boars of large size.

In 1559, he wrote during the hunting season to Duke Christopher of Württemberg, "In this year's boar-hunting we have had good sport with our young hounds, and killed 1120 boars." In the winter of 1560, there were 1274 killed. And in November 1566, in three days, 238 good fat boars were killed. In Hesse Darmstadt, also, the number hunted yearly was very large. In 1724 it amounted to 835 in one district only; and in the following ten years to 5543. And in 1581 the Margrave John George of Brandenburg wrote to the Landgrave William of Lower Hesse, that he had killed 501 wild boars in that year.

Their colour is black, or a blackish brown, although occasionally some will be found piebald, which, how-

* Communicated by Dr. Föringer.

ever, is rather a deformity than otherwise. The hair is long and bristly, and in winter increases in length. Towards summer, when they change their coat, their appearance is well nigh disgusting; for the hair falling off in patches gives them a mangy look. The head of



the wild boar is longer and more pointed than that of the tame animal; its ears, too, stand more erect, in order probably to hear more acutely, except when furrowing in the ground, and then they hang droopingly, like those of the common swine. They will live to a good age,—twenty—thirty years; and where forage is plentiful attain a considerable size. Some in the Hessian forests weighed 3 cwt., 4 cwt., and $4\frac{1}{2}$ cwt.

They are fast, but not agile in their movements, and their trot, though seemingly not fleet, enables them to get over a considerable space in a very short time. They do not turn easily, and hence there is no difficulty in evading the charge of an irritated animal.

In November the rutting season begins, and lasts four or five weeks. At such times their neighbourhood may be perceived by their peculiar smell, even from a distance. Then is the time for battles, and wounds are not seldom inflicted by the formidable tusks of a jealous wooer. The rut over, the males leave the troop and are off to the woods, where they remain in solitary retirement.

It is curious to see the wooing of such animal, and to observe the way in which he gives token of his love. There is little of endearment in his manner, nor does the tender passion seem to have softened his rude nature and made him gentle. Usually the lover endeavours to make himself agreeable to the object of his choice, and to ingratiate by tenderness, by a longing air, by meekness and subserviency, that says, "I am your slave." But with the wild boar there is none of this. He reverses the whole system of love-making as accepted both by man and brute. Instead of caresses he imparts blows; he runs at her, to whom he would make known his affection, and with his snout gives such pokes in the ribs as almost to destroy her equilibrium.

He bangs her sides and gives many a dig in her flanks; a procedure, however, which does not seem much to her taste.

The period of gestation is eighteen or twenty weeks; and on a well-prepared bed of leaves, moss, and the needles of the pine and fir, a litter of eleven or twelve yellow-striped, greyish-red porkers are brought forth. This rather droll appearance they soon lose: their colour becomes more uniform, and the little round bodies less smooth. They stay at home for several days after birth, during which time their mother seldom leaves them. Of her bravery and devotion notice has already been taken. In the second year the tusks of the males are to be seen, and in the third they are already conspicuous, white as ivory.

The wild-boar, like other forest creatures living on simple food that neither heats the blood nor creates vicious humours, will often recover in a surprising manner from the effects of wounds, or the loss even of a limb. And they not only live on in perfect health after such rough amputation, but regain their portly size, and, unless too severely maimed, rove about with their fellows as before. Being social and always found in troops — the old boars excepted — opportunity is afforded for observing them when together, and for seeing how they observe the amenities of social life towards each other. In such a boar-family there will often be

one of decided bad temper: to the most superficial observer his cross-grained disposition will be apparent, not only from his behaviour among his neighbours, but in the family circle and with his own brothers and sisters. If one come near him a grunt and a blow are the greeting given; and though all, from a knowledge of his sour temper probably, seem disposed for peace sake to give way, he is at every moment picking a quarrel with a neighbour, and destroying the harmony which would otherwise reign over his home. His mother, whose patience is at last exhausted, may run at and nearly upset him with a well-applied box on the ear, given with her hard snout; but this only makes him the more sulky and disagreeable. Presently the party will be joined by some other members of the boar community, distant relations probably of the young misanthrope; and one of these, fairly disgusted with such behaviour, and in no wise feeling bound to put up with it, nor caring one jot for young Hateful's scowls, turns about, and gives him what he has long deserved, a sound thrashing.

Another again will be as meek and long-suffering as the other is insolent and over-bearing; giving way without resistance, enduring all without complaint, a very Cinderella among her bolder and overweening sisterhood. What a life such a timid oppressed pigling leads! If it join the meal of the others, a grunt and a

poke say, "What do you want here ! always eating and always in the way !" though in reality the said little porker gets less to eat than any of the others, for they eat their own share and his portion too. From time to time the mother makes a stir, and with a few pokes right and left sends the unmannerly crew to the right about. But this gives rise to many a murmur, and the chastised are now the aggrieved party, and still utter many a grunt of discontent long after the punishment has been received. These then herd together, and for a while are as sulky as possible.

But now arrives from distant parts of the forest some old recluse, who has left his retirement to learn what society is about. You see by his air and walk as he approaches that he has full sense of his own importance. There is an *aplomb* in his gait which such self-consciousness never fails to give. He comes up boldly, somewhat insolently, towards an assembled group, and at a short distance suddenly halts, and with his nose in the air looks down on the swinish multitude.

There is a contemptuous disdain in all this, as if the whole set were beneath his notice. For he knows very well that the moment he chooses he can drive them all away, and he regards them accordingly. So he advances ; and the first he meets he half knocks down ; not that the one so used has done aught to merit such treatment, but merely because the imperious intruder

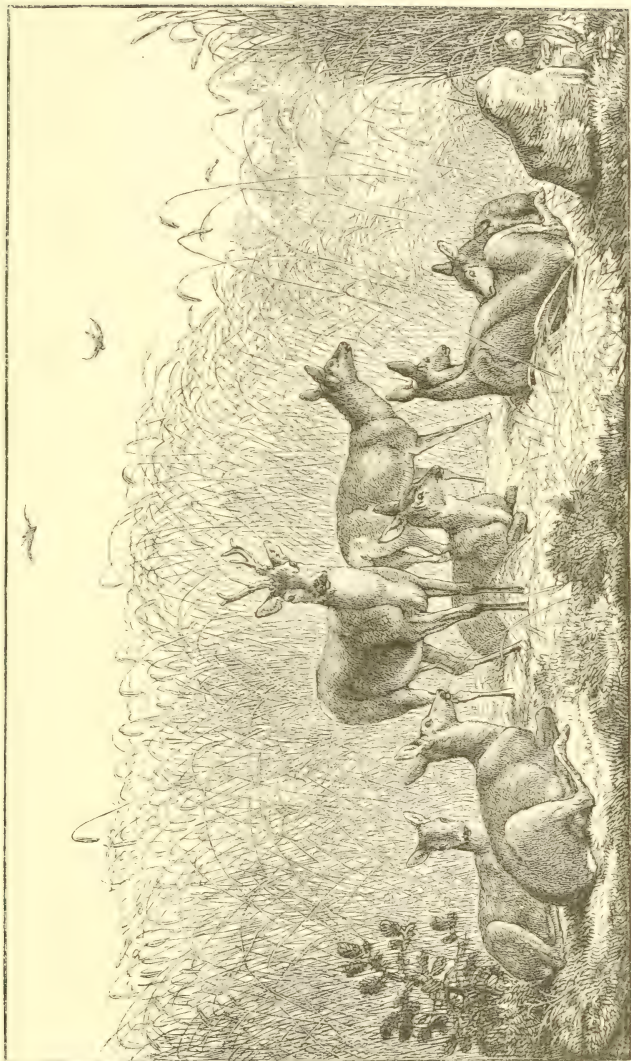
will tolerate no one there but himself. It is his way of saying, "I am here, so be off!"

Thus he is a bully, in the full sense of the word; but withal no coward notwithstanding. If you have an opportunity of witnessing how unflinchingly he faces his enemy, and how bravely he meets death, you will forget his bullying, and admire, nay respect, his courage. Peculiar circumstances once enabled me to share in such a contest. A large boar had been wounded, and retreated to a dense covert. We tracked, and at last came up with him, concealed among some thick bushes. How he was wounded we did not know; if dangerously or but slightly only. Three strong dogs surrounded the bush, yelling furiously. They saw him as he sat within, but could not and dared not approach. The forest rang with their barkings. They at last got nearer, but could do little; and the boar knowing the advantage of his position, was not to be forced from it. He was so hidden by the dense branches of the young firs that, even had the dogs not been near him, it was impossible to fire.

Thinking there might be an opening sufficient to get a view of him, and so have a shot at a favourable moment when the dogs were on one side, I lay down at full length on the snow, and peered into the hollow of dark boughs. There sat the sturdy animal of formidable size. His jaws were covered with blood and foam, and

he was snorting with rage and suffering. As now and then the almost frantic dogs closed upon him, he merely made a sweep with his head and they again fell back. He was seated on his hind quarters, like a dog, and did not move to pursue them or rush at me. The bloody foam flew around with his snortings, and his eye glared at me as he saw mine so near, staring at him. I now perceived he had been shot in the lower jaw which was broken and hanging down, and this accounted for his remaining stationary instead of advancing to the attack. His most powerful weapon was useless; he was like a knight whose sword had snapped at the hilt. But he did not flee, and, devoured with wrath at his inability to wreak vengeance on his aggressors, he sat there and kept them at bay. His watchful eye moved on every side, and each attack was repelled, come from what quarter it might.

I could not but admire the noble animal, keeping thus his foes, both brute and human, at bay; and I was so close to him that I could watch his expression and follow every movement that he made. He fell at last, however, maintaining his gallant bearing to the close. A bullet ended the strife: and as he before had uttered no complaint, so he now met his doom without a cry.



ROES.

THE ROE.

Cervus capreolus. Linn.

PART FIRST.

IF, when the sun has gone down behind the distant hills, you happen to be strolling quietly near the skirts of a wood bordered by cornfields, you may probably see, standing among the nodding golden ears, a group of animals, slender and delicately formed as an antelope. Maybe you are not alone, and then your glowing words, though softly whispered, will hardly be low enough to prevent those watchful creatures yonder from catching their sound. See ! each pretty head is suddenly raised, and turned inquiringly towards you ; the finely-pointed ears are pricked up and motionless ; and in the large, bright, lively eye is an expression of wonderment and fear. Stand very still and watch them. Not knowing what to make of the apparition that has thus approached the wheat-field on that placid evening, one will utter a harsh sound indicative of alarm, and then, as a spoiled child might do, will stamp on the ground in seeming

defiance. But the little pettish action denotes anything but that; for there is no creature more timid and less inclined to brave danger or a foe. A panic has seized them, and away they bound into the neighbouring coppice. They were roes.

Not only are they afraid of man, but, when with other animals, any sudden or rude motion will awake in them a feeling of fear. A fallow-deer coming straight up towards them, or wild boar with his bullying air, will make them at once retreat. When there is nought to frighten them, nothing can be more pleasing than their gentle expression. There is something so familiar and friendly in it, and the large size of the eye, which is of a bluish colour, gives the countenance life and animation. But despite this air of familiarity, it is in reality, even when tamed, never quite at ease and free from apprehension for its safety. When surprised, then its bewilderment is at its height. Even the natural instincts which impel to self-preservation seem to have forsaken it. All presence of mind is lost, and it will run blindly round, rushing into the very danger it would evade.

Its timidity causes it to have its ears always up, and moving in all directions, now this way, now another. And this organ is one of its prettiest features, for the ear is pointed, oval, and elegant in shape. It has besides a narrow bordering rim of black hair, which

adds to it a finish and precision. The neck being long, and easily bent to the side, accords well with the slender legs, and gives an air of extreme grace to the animal. The head is pointed and finely formed throughout ; it is light, and the black ring round the nose, contrasting as it does with the colouring of the hair, gives thus a certain prominence to that feature, imparting an expression just prettily pert enough to be attractive without being bold. The like we all have seen in a blooming face, where the nose was *not* Roman, but slightly to the contrary, lending thus a certain wilfulness ; but where everything like boldness was kept down by the laughing eyes, the arch smile, and the magic charm of " eighteen."

A mere glance at the roe, leaves an impression of elegance, lightness, grace ; and this is no doubt occasioned by its symmetry ; by the delicateness of form of those parts which present themselves most prominently at once : the tapering oval ears, the pointed head, the long neck, and the slender legs.

Should you perchance, when waiting in the forest, see a roe that has been scared by some threatening danger, stopping at last to breathe after a headlong flight, you will learn what a tender, fragile creature it is. Every limb trembles, its flanks are heaving and it pants convulsively. It looks bewildered, and is at once a picture of fear and utter helplessness.

In severe winters the roe suffers greatly: it sinks into the deep snow, and will often be found embedded therein up to the flanks, dead from exhaustion in its efforts to get out. It is unable to bear up against intense cold; and hence, after a bleak winter, the number that have perished is always considerable. At this season, too, it is exposed not only to the inclemency of the elements, but also to a fierce, wily, unrelenting foe, ever on the alert and ready to follow on his track. The fox—full of wiles—now prowleth about, seeking what he may devour. Should he chance upon the slot of a roe, he will follow it with light step over the thinly crusted surface of the snow, and at last finds the object of his search struggling in the drift through which its small hoofs have sunken down. “It’s an ill wind that brings good to none,” thinks the fox as he feasts upon his prize; and, indeed, in a country where game abounds, a season that to other animals proves most fatal, for him is one of booty and good cheer.

In the rutting season the roebuck is most passionate and impetuous. At such time it is dangerous to approach him if in an enclosure, and many a time have severe injuries been inflicted by a tame animal kept in a garden or a paddock on those persons who were so incautious as to enter there. The horns are very sharply pointed, and as in his onsets they just reach to

the stomach of those he attacks, cause oftentime grave wounds.

The buck remains the winter through with the doe and her kids, but when the time comes for changing his grey winter coat, he leaves her and roams alone. You may be startled as you wander along a hill-side at evening to hear suddenly from the opposite slope, a short, harsh, abrupt sound, breaking upon the tranquillity of that retired spot. You look up, but see nothing. A moment after it is repeated, but this time not once only, as at first, but two or even three such short angry sounds follow each other in quick succession. Ah, now you see him! There he stands on yonder upland, in the middle of the clear green space, between the bushes and the young birches, whose branches still scatter rain-drops as the breeze gently rocks them. There had been a shower in the afternoon, but the sun came out later, and the evening is fine, and so he has left the wet coppice and come out upon the glade. He stands for a moment at gaze, stamps with his foot, utters again the short discordant sound, still looks at you in fear and great astonishment, and then is off to the thicket. The doe, when scared, expresses her fear in the same manner, but with her the sound is in a higher key. It is as though the French word "*bœuf*" were pronounced as gutturally as possible, with the omission of the final *f*, and repeated quickly.

When the animal is in pain the cry is a rough, disagreeable bleat. The kid calls its mother and the mother her kid by a sound not unlike a fine "peep, peep" in a high key; the first somewhat longer, the second short and suddenly ending. The cry of each may be easily distinguished by the tone; that of the kid having the shriller tone peculiar to infancy. The doe of a year old, when pursued for the first time by the buck in the rutting season, utters the same cry as complaint.

When the rutting season begins, the buck may be attracted to the spot where you stand concealed, by imitating the call of the doe. The imitation must be good, however, or he will discover the cheat and be off, and no enticement will then lure him back again. Broad grass, or, still better, the fine rind of the birch placed between the lips, gives the sound most naturally; and not unfrequently, when the usual cry of the female fails to attract him, if you imitate the finer note of a much younger one, just bursting into blooming doehood, the old libertine will prick up his ears, his head becomes erect, and with a bound or two he leaps to the spot where he expects to find the delicate object of his hopes. But you must be very quiet, or an unusual sound, a movement however gentle, will be sufficient to make him shy. For passionate, intensely passionate, as is his ardour, it does not blind him to the presence of danger, as with the stag; he gazes and listens as he is

wont, and in an instant his fine sense of hearing would detect if one of the sounds from your lips were not quite like the preceding. There must be no discrepancy, either in the tones or in their measure, if you would outwit him. But if you do it well, and there be a buck in the neighbourhood, he will certainly make for the spot whence the sound proceeds with precipitate haste.

To watch what I have elsewhere termed "the family life" of forest animals is always interesting. In the case of the roe it is a doubly pretty sight to see the mother with her young, on account of the graceful form and bearing of the actors in the nursery episode. The mother will play with her kid, bounding now towards and now away from it; and a favourite pastime seems to be to pursue her little one or be pursued by it round the stem of a tree. They thus will play at bopeep together, and you may find trees in the forest round the stems of which a circle is trodden in the ground from the merry racings of the happy playfellows.

The kid when quite young will, if afraid, crouch like a hare on the ground, bending back its ears upon its spotted back. The white spots disappear in a few weeks, and in colour it henceforward is like the parent animal. The reddish brown coat becomes in autumn of a less lively colour, and changes into a brownish grey. The nose is always cold and wet: the throat is yellowish, and the jaws of a light whitish grey. The roe, though

so slenderly formed, has sinewy and elastic limbs; and it bounds both high and far, as well for its pleasure as when pursued. The tendons of the legs are unusually thick for an animal of its size. Indeed a roe possesses far more muscular strength than would be supposed. Let even a strong man attempt to hold fast a buck and prevent it escaping, he will find he has enough to do to retain his prisoner. If he seize the animal by the horn, he very possibly may repent his rashness. The roughness of the surface will lacerate his fingers, and unless he be very carefully on his guard, the infuriated animal may send the forked points into his thigh or his abdomen.

They take the water readily, and are powerful swimmers. I have known them cross the rapid Danube even where the current was strongest, and the breadth of a good sized lake will not deter them from passing to the opposite shore.

As with red and fallow deer, there are also varieties differing from the usual colour of the roe, sometimes quite white, and, what is still more rare, spotted with white.

A peculiarity of the roebuck is the frequent occurrence of an abnormal horn. There is no other wild animal with which this deviation from a natural form is so often found. Sometimes three and four instead of two branches, ornament the head: now, instead of grow-

ing upright one horn will grow downward, twisting in grotesque contortions ; and again the whole, not shoot-up at all, will be knotted together in a round ball-like heap.

Sometimes, too, a strange excrescence, covered with velvet like the budding horn, grows, even as a fungus, out of the head ; and hanging down in a long curly mass, resembles exactly a barrister's wig. This will become so long as to fall over the eyes, and greatly incommode the animal. The usual number of points on each branch of a full grown buck is six, but in this respect, as well as in the form, nature often indulges in wayward freaks. The little roughnesses on the antlers are considered a beauty by the sportsman, and very frequently the horn of the roebuck is gnarled thus in a beautiful manner. The older the animal the more thickly are these beads clustered together. The round projection forming the root of the horn grows larger and more indented from year to year. This growth and casting of the horn is one of the most curious, and to me, most astonishing of the many processes of nature. In the stag it is more striking on account of the imposing size of the antlers ; but in reality the provision for this growth in an animal's economy is no less wonderful in the smaller than the larger creature.

In the same year that it is born the roebuck receives this ornament peculiar to his sex ; but these first horns

are thin, sharply pointed, straight projections, only about three inches long. In Spring — in March or April — the buck rubs them vigorously and seemingly with an intensely pleasurable feeling, against the stems of trees, — of the larch especially, — till the velvet covering is all scraped off. This new horn is smooth, or nearly so, and possesses little beauty; and it is only those of later growth which have any value on account either of their formation or from their richly pearly surface. The new horn wants three months for its formation, attaining its full size in March. But this process of rubbing the new horn against the branches and stems of trees causes much injury to the young plantations. Where roes are plentiful, you will see in all directions the stems of the younger trees and bushes thus peeled of their protecting covering; the rind scraped roughly off or hanging down in ribands.

The roe prefers small woods interspersed with glades to extensive forests. Its haunt is on the borders of the coppice, when corn and linseed fields afford a dainty repast. But in winter, when the snow lies deep, it seeks the young plantations, and browses on the tender shoots, doing thus considerable damage. Nor in winter only, for in other seasons also when it can find them it will visit these, and mar the growth of many a promising tree.

Like other animals of the forest, it follows the

very same path that it before has chosen when moving from place to place in seeking food. Even if scared away from an accustomed pass, it returns to it again soon after.

In summer when the air is filled with insects and they buzz in countless numbers about the animals exposed to their persecutions, the roe will seek shelter in the high corn, and there, lying on the cool earth, with the full ears bending over it, remain for hours thus sheltered and embowered. It prefers light places to the darker forest; meadows, seed-fields, glades, and hill-side slopes. When the buck is not alone, he will be found with his two kids and their mother, but roes never herd in troops like fallow or red-deer. When such family is on the move, the doe is almost always in advance, and the buck comes last of all.

THE ROE.

PART SECOND.

A NEW WONDER IN NATURAL HISTORY.

MULTIFARIOUS and diversified as we may have believed the arrangements of Nature to be, still with the discoveries of new lands — of New Holland, for instance — fresh proofs of the manifold ways in which she orders things have been presented us; causing additional wonderment, and proving anew that whatever is of divine origin is not bounded but infinite. The last quarter of a century has disclosed to us connecting links in the creation of which we before had not the remotest notion; and new forms, as well as new forms of life, which, had the imagination of any man happened to invent the like, would have been looked upon as belonging to the fabulous, and quite on a par with the phoenix, or the tree whose blossoms were rubies. And yet the Indian archipelago has made us familiar with plants, whose flowers, if not jewels, are winged animals and reptiles, at least in shape and colour; grotesque and odd sometimes, and resembling nothing of vege-

table shape that ever grew before. And though as yet we have found no creature answering to the description of the dragon of fable, is, after all, that quadruped flying through the air, the kangaroo, or that other quadruped with a bill like a duck, a less marvellous creature? The trees just discovered in America give an insight into the active powers of Nature, surpassing by far all our previous imaginings. And there are, doubtless, processes daily at work, wholly unknown to us, which, were they laid open, would appear veritable miracles. As in those giant trees of California we behold how grandly through a succession of ages vegetable life can go on expanding and developing, seeming to be

“Produced too slowly ever to decay;”

so in the wheat grains and the peas found with the mummies in the Pyramids, we have a contrary instance, but equally wonderful, of vitality slumbering for 4,000 years; yet on being aroused, waking up with as fresh life as though its sleep had been but from the sunset of one day to the sunrise of the following morn.

A like wonder has been going on around us since the world began, recurring annually at the allotted season, without our having the least foreboding of its existence or even of its possibility. And it is this: that the germ of a new life should be deposited in the living parent, and, instead of fecundating and growing and becoming

alive, should remain dormant, though surrounded with warm pulsating life: that, long after only, it should quicken, but then with hourly development advance towards maturity and birth. And the animal of which we read such marvel is the Roe.

I am not aware whether it is generally known that there always existed an uncertainty as to the rutting season of the roe and of the period of gestation. Some asserted the season was in July and August, and others, who brought forward equally good premisses to prove what they said, declared it to be in December. Indeed it was the very circumstance that the facts — and facts they were — communicated by the two parties seemed equally conclusive which made the enigma impossible to unravel. For the occurrence noted by the one and the inference drawn from it, appeared absolutely incompatible with what was observed by the other party, whose reasoning, in reality, was thoroughly well grounded. Indeed the more the matter was considered and the facts then known weighed, the greater was the difficulty in coming to a decision.

One of the first authorities on all matters relating to wood-craft in Germany, Dietrich aus dem Winkell, in spite of his experience, his enthusiasm, his patient observation, and the information afforded him by numerous investigators like himself, came to a wrong conclusion, and never, even for a moment, had a foreboding of what

really was the truth. Already in 1836 repeated investigations were made in Brunswick with a view to throw light on the mystery, and again in 1843. But although certain results were obtained, and facts — incontrovertible facts — proclaimed which fixed, at least, the period of the rutting season, still it was only in 1854, after a ten years' study, that Professor Bischoff, of Munich*, was enabled to solve all doubts, and prove the existence of a new wonder.

In order to show wherein the difficulty of a solution lay, it will be necessary to allude to the many contending incidents observed by the forester and the naturalist; and to this end it is best to recount briefly what Dietrich aus dem Winkell tells us of his surmises, his investigations, his doubts, and his conclusions. It is necessary, however, to premise by stating that in July and August the buck may be seen pursuing the doe; and that at such season it is enough to imitate with nicety the cry of the female to bring the roebuck leaping along through the coppice to meet and dally with his paramour. *This was certain, and was known to all as a certainty.* Equally undeniable was the fact that in May the young fawns were born.

This is the same time therefore as the hind (red-deer) may be seen with *her* fawn, and yet the rutting season of the stag takes place at the end of August, or beginning of

* Then of Giessen.

September; consequently a month later than that of the roe. To Winkell this seemed anomalous; for that the period of gestation of an animal so much weaker than the red-deer, should, instead of being less, be four weeks longer, was contrary to all precedent. And yet, as has been said above, the roebuck *had been seen with the doe* in July and August, and in May there was the young animal a few hours or a few days old. But still our old forester was not satisfied with these facts. From the end of July and throughout the whole of August he was a steady and unwearied watcher in the woods. Before dawn he was at his look-out, on the branch of some ash or oak, again at noon, and at evening, when the sun was setting and the roes began to move out of their retreat among the long cool shadows; there he was watching his roe-deer, nearly all of which he knew, and could distinguish as a huntsman recognises the hounds of his pack, though consisting of thirty couple.

“I confess,” writes this thorough old sportsman, “my patience would hardly have endured the trial, if Nature herself had not rewarded me by a bountiful enjoyment of her delicious beauties, and if many an opportunity had not been presented me of delighting myself in varied wise, by noticing the peculiarities of the animal whose exact observation was now my chief intent.” He saw that when the time approached for the buck to chase the doe, the stronger roebuck drove away any weaker

rival who might venture to show himself. If, when the stronger buck was toying with the female, the weaker one ventured to approach another doe,—the former love of his formidable rival,—she, instead of yielding to his caresses, would draw him by a coquettish retreat to such spot where her former unfaithful lover was with his new bride, and about to claim his rights as her lord and spouse. But, on beholding the bold new comer, he would leave these joys untasted, to chase and punish the intruder.

This circumstance Winkell considered a hint, that the rutting *now* “could not really be in earnest,” especially as in November and in December a buck remains with one and the same doe. One morning in August, from his look-out among the leafy branches, he saw a doe, part of whose ear had been cut off while a fawn, chased by a roebuck; and at the foot of the tree where he was, the marriage was consummated. He waited and watched its repetition more than once. The same happened again some days later with another doe. Both of these does he shot in October, and on examining them minutely, no traces of a state of gestation were to be found. Every following year he shot in October an old and a young doe; some, too, *whom he had seen* with the buck, and recognised by certain marks, and which therefore ought, on dissection, to have given signs of pregnancy. But in none of these was an embryo

discovered, or any sign that the animal might later possibly bring forth young.

Winkell, therefore, came to the conclusion that this, as he imagined *unfruitful* rutting season, was merely a preparation for a later rutting, which took place in December. For this reason he designates the former "the false rut," and the other "the true rut," deciding thus the period of gestation to be twenty and not forty weeks. And truly he discovered in those does which he dissected in the month of December, traces of an embryo, which, as the season advanced, was more and more developed. What therefore, he thought, could be more surely proved than that the "true or effectual" rut immediately preceded this state of things, and was in November or December? And until, as he said, this embryo should be discovered in its different stages of development from September, and on through the following months, until then would he not give credit to the theory, that the rutting season of the roe was early in the autumn. "For who could believe it possible," he continues, "that during one half the period of a state of pregnancy, all symptoms of such condition should be wanting in the particular organs of any mammalia?"

And yet, — as no one known creature of the like genus afforded a precedent for this deviation from all recognised laws, such a circumstance might well be, and

was, deemed an impossibility, — it nevertheless is a really existing fact.

One most important step towards clearing up the mystery had already been made by Dr. L. Ziegler in Hanover, in 1843. It is on a par with that discovery preceding Harvey's, of the circulation of the blood; the discovery, namely, of valves in the veins. Dr. Ziegler had determined, beyond all doubt, that in the organs of the roebuck, during the winter months, there existed none of those concomitants necessary for the procreation of an animal. The necessary juices were absolutely not present: they were quite dried up, and would not be found again till spring or summer. This settled, at least, the one question as to the "false" or "true" rut, and decided also that the period of gestation could not be twenty, but was forty weeks. However, if the rutting season of the roe was in July and August, and then and then only the fecundating power existed and could be communicated, what a riddle it was, that for months after this time no trace whatever should be found of impregnation; no change in the state of the organs, no sign of an embryo! But when it is stated that the egg out of which the young animal has to be developed, was a point hardly bigger than one of the full stops in this printed page, it will surprise no one that it should so often have escaped the observation of those who sought after it, and were unable to detect its

presence. An examination which took place in the month of August proved the diameter of such an egg to be then $\frac{1.0}{100}$ millimètre. Even on the 7th January, when a quick development had already taken place, its size was not larger than this $\frac{1.0}{100}$; under the most favourable circumstances, a skilled and practised eye would be necessary to discover so small an object, mixed up, too, as it would be, with mucus, lymph, or any other fluid. But if the investigation occurred a few hours only after the death of the animal, the attendant difficulties were very greatly increased; for, as with all game, the intestines soon begin to decompose, the neighbouring organs, in and around which the egg would be sought, suffer from the contagion. Thus, the delicate tissues would no longer be in their habitual healthy state: and it may be imagined, therefore, how great the difficulty of seeking the diminutive globule amid a mass of teeming animal matter.

The result to which the investigations above alluded to have led, are as follows. The rutting season of the roe is at the end of July and in August; this being the only time when the organs of the male and female are in such a state as to make procreation possible.

In a few days, at most, after the rutting, the egg progresses in the usual way through certain channels, — a process unnecessary to describe here, — and then

arrives in the uterus; and here, *without undergoing any change whatever*, it lies dormant $4\frac{1}{2}$ months.

In this undeveloped state it had always been overlooked by naturalists; moreover, as the uterus remains also quite unchanged, the belief that the doe was not pregnant seemed to be confirmed.

As will be remarked, all the circumstances were such as to mislead the investigator, and to incline to false conclusions.

But in the middle of December, the germ which had been lying so long inactive, suddenly quickens; and, with the same fast progress as is observable in other mammalia, develops so considerably, that in from 21 to 25 days all the parts of the egg and all the organs of the embryo are so formed as to undergo no further change before birth, except an increase in size.

The different gradations in the development of the embryo, the various appearances which present themselves in the more or less advanced stages of growth, have been omitted as quite unnecessary, and to many a reader wholly unintelligible. These, however, have all been circumstantially noted down, and drawn with the strictest accuracy; and, moreover, the delicate germ, and its infinitesimal tendril-like offshoots, have been preserved, so that their progress towards maturity may be followed day by day, and week by week, and the eye of

the uninitiated even behold and comprehend what once Science alone could see.

And for such discovery, and clear display of it, we are indebted to Dr. Louis William Bischoff, at this moment Professor at the University of Munich.*

Since writing the above, a curious fact has come to my knowledge. On the evening of Oct. 26th, after coming down from the mountains, where we had been in pursuit of chamois, — said to one of the men, “Well, Martin, where have you been all this time?” “Oh, I was in the wood, trying to shoot a roebuck.” “And have you got one?” “No, I saw two; but I could not properly get sight of them among the bushes so as to fire.” “And did you call them again, as usual?” “Yes, with the rind of a birch tree. Directly they heard me, on they came leaping along as though bewitched. They sprang towards me at once.” And then I learned that in other years equally late in the season, he had lured roebucks in this way; they coming to the call apparently with the same hot desire

* In case any of my readers should be desirous of studying the subject with more scientific accuracy than it is possible to do from this sketch, the title of Professor Bischoff's treatise is subjoined: “Entwickelungs Geschichte des Rehes.” Giessen, 1854.

as in the month of August, which is the known period of the rut. It was the first time I had heard of the buck being shot in this manner so late in the year. When we take into consideration the discovery of Dr. Ziegler, as to the condition of certain organs of the roebuck during the winter months, this passionate state of the animal adds another enigma to the question still remaining to be solved. Whence proceeds this lust, and to what does it tend? For young roes are not found at different seasons of the year. The time of their birth is at one season *only*, a proof that there is really but one season for the rut, but one season at which the conception of the doe begins.

This display of concupiscence on the part of the roebuck at the very end of November is also a deviation from the law which seems to govern those animals which shed and reproduce their horn. It has been shown in the paper on the Stag how intimately connected the growth of this ornament is with the organs of the generative system. And we know also that, both with the red and fallow deer, it is only when the new antler has attained its complete state, and rises above the animal in all its pride and beauty, that the creature is in its fullest strength, when coming forth from the recesses of the forest, robust in body, and with an organisation fitted to answer all the demands which its impetuous male instincts are about to make upon it.

The horn therefore in its perfect state seems to be the sign and complement of ripe and vigorous male life. That the roebuck should rut at the very time when this badge of virility was wanting, would alone be quite anomalous; and this consideration might have inclined old wood-craftsmen to place the "true" rut, as they called it, in August, rather than in December, as they all were unanimous in doing.

THE STAG.

Cervus elaphus. Linn.

PART FIRST.

THERE is no habitant of our European forests so stately as the stag. His presence is majestic, and to behold him has given delight and been a cause for gladness from remotest time. And, because of his noble bearing and of the pleasure which kings and princes, and knights and ladies had in his pursuit, it was ordained that no ignoble hand should presume to wage war against him; such being a privilege reserved for the high and lordly only. And this, and his imposing mien, caused men in those lands where the forests were most thickly peopled with his race, to give him the distinguishing title of the “noble” stag: German *Edel-hirsch*. And a noble animal he is, and well deserves the high pre-eminence. And let the attendant circumstances be what they may, a thrill is felt when his form is suddenly caught sight of, moving through his woodland domain. Whether you are prepared for his approach, or whether he at once

stands before you and gazes steadfastly in great astonishment at you, the intruder, alike the emotion which you are sure to feel, and which will not be repressed.

You are in the dark pine forest, where all is so lonely and still, and the tall firs with their monotonous form stand immovable. Nothing moves save the flickering shadows on the red trunks, and the sunbeam that comes slantingly in and hangs a great patch of light on a distant stem. It wavers and vanishes. Again it creeps in and lights up the shafts supporting the gloomy roof, and as you peer searchingly into the depth it seems there is a something reddish-brown out yonder in the distance. But there are many bars of light and great flakes of brightness, and a sort of net-work like sunbeams just there towards where you are looking; for the sun is sinking and is shooting red flames upwards into the sky. So you are unable to make out what it may be. However, you still look on, and by degrees you make out a form; and it grows in distinctness, and with more widely opened eyes you now gaze upon it, for you see parts which were unseen before, and you tell yourself that the red brown bit of colour which the rays illumined so strangely is in reality a stag. But he has observed you some time already, and with head flung back and wondering eye is gazing at you intently. His antlers spread wide above him and give him a most imposing presence. He steps slowly on: the sunlight

dances along his dappled moving body, there is a dazzling confusion of passing gleams, and he has vanished you know not whither.

I have waited for the stag's coming at early morning, have followed him in the woods, and listened to and hastened after him in the mountains, when his roar has re-echoed from their slopes and been answered again from afar. I know the excitement of pursuit, and the delight, and the elate feeling when, still incredulous, we grasp the indented crown of the giant extended at our feet. And I can understand therefore how the lord of a domain should be jealous of any encroachment on his forests, and should fence them round with laws and penalties. Heaven forbid I should defend inhuman statutes or acts of savage barbarity; but it is, I assert, only he who knows all this, and has himself, at moments, been transported with an ecstasy of joy, can comprehend how it should be possible to grow into so insatiable, all-absorbing a passion as to make a man forget his humanity, and, in all that relates to this one matter, become a very demon.

Yet it has been so; and, human nature being always and everywhere the same, the same ruthless acts would no doubt recur again were they not prevented by the stern severity of law. All this, however, only shows what a spell pervaded the deer-forest, and how the presence of the noble stag acted as a fascination;

drawing men onward, and charming their senses that they might be maddened with one single passion.

We all know of the law enacted by William the Conqueror, that whoever should slay stag, hart, or hind, "him man should blind;"* and William Rufus was as severe in the penalties he enforced as his father. There is hardly a passion which so grows with what it feeds on, as the chase. For even great success does not satisfy: it rather excites to new endeavour, and inspires with hope of obtaining still nobler trophies. Thus William of Hesse stalked in the rutting season more than eighty stags, "for the greater part with large handsome antlers" of twelve, fourteen, and sixteen points; and yet he complains of the shortness of the season, "shorter than he had ever known it before in his life." Thus the hunger is not appeased by food, but becomes a ravenous craving.

And so it came to pass, that at length human life was held cheaper than that of the deer; for whose protection it was enacted, that he who should be caught in the act of laying a trap for game should lose both his hands.† And the clergy were possessed by the same passion: abbots, bishops, and other princes of the church. The abbots of Fulda had an immense territory, over which they enjoyed the *exclusive* right of chase. Nor were these ecclesiastics more merciful

* Duke William of Wurtemberg, in 1517, passed a similar law.

† Anno 1380. Büdingen.

towards offenders when their favourite pastime was endangered. In 1537 the Archbishop Michael of Salzburg had a peasant, who took possession of a stag which he found dead in his own corn, sewed up in the animal's skin and worried to death by his hounds, he himself looking on the while. In 1562 a poacher was taken in Hesse. The Landgrave, "in his great mercy," remitted the sentence of death; but the man was tortured, his right eye put out, and a stag's antlers branded on his forehead. The usual punishment was the gallows. It is no wonder, therefore, that, when thus protected, the amount of red-deer in the forests of Germany became immense; and we may form some estimate of their number when we learn that 7,000 head perished of cold in a single very severe winter in Wurtemberg, and in Hesse in 1570-71, 3,000 head were found frozen to death. In the summer of 1558, Landgrave Philip stalked and killed 102 good stags, one of which was a stag of twenty, and another one of eighteen. Besides these he killed twenty more in the forest. In that year, 211 stags were delivered at the buttery of the palace at Cassel alone. In 1561 the Landgrave killed between the 1st of June and the 1st of August eighty-one stags, and had taken in hunting ninety-six: besides these he still expected to shoot forty, and to hunt sixty more. Among these was a stag of twenty, two were of eighteen, and three of sixteen.

In this year 367 were killed, altogether; and some were stags weighing $4\frac{1}{2}$ cwt., and with $3\frac{3}{4}$ inches of fat on their broad backs.

The Margrave John George of Brandenburg, in a letter to the Landgrave of Hesse, tells him that in 1581 he had killed 677 stags, 968 hinds, and 501 wild boars. In another year Ludwig William shot, *in stalking*, 345 stags, and his brother 417. In the summer of 1588 the forests near Smalkalden gave, as the produce of three days' sport, 50 good stags: some of them weighed 5 cwt., and had fat five fingers broad on their backs. In another year, 1603, before the 23rd of September, Landgrave Louis IV. had already killed 93 stags.

In Bavaria, too, red-deer were plentiful. In the diary kept by Duke Albert V. is carefully noted down the result of each day's sport. In one year we find 139 stags as the number he had shot "with his own hand:" in another year 246, and so on. In twenty-five years he had brought down 2,779 stags. And in the game book of Duke William IV. of Bavaria, 817 are marked as having been killed in 1545. And the stags of those days were unlike the degenerate race that *we* know. In 1632, in the Darmstadt territory, 472 head of deer were killed: the largest stag weighing 6 cwt.*, and being a stag of 24;

* I have no means of learning the *exact* relation in which this weight stood to our own; but unless a considerable change has taken place since the time in question, the difference is unimportant. It was customary to weigh the stags as they fell.

whilst many of the others weighed no less than 5 cwt. In 1762 Maximilian von Lichtenstein shot in Saxony a stag weighing 7 cwt. 95 lbs; and in 1723 Count Stolberg one near Agnesdorf weighing 910 lbs.* And even in later times — in our own day — there were still enough to afford good sport to those who had the opportunity of enjoying it. In 1844 the present reigning duke of Saxe-Coburg-Gotha shot 75 stags, and 105 deer. The late Prince Leiningen had, as he told me, shot 700 stags in his life. He once in fourteen days shot 2 of 16, 5 of 14, and 17 of 10 and 12 points each. Count Erbach had shot near 1,000 in his day.

The delight felt in all that belonged to wood-craft was, in many cases, not to be impaired by ill fortune or even imprisonment. Landgrave Philip of Hesse, when far away in captivity, was ever occupied in thought with the chase and the preservation of the deer. In all his letters written to those at home the same admonition recurs: "Take thought for the forests and the deer; see

* The portraits of such famous stags were generally taken; and in many old hunting seats in Germany, in Erbach, Gotha, Moritzburg they are carefully preserved as interesting memorials of the past. A collection of engravings by Rüdinger gives the portraits of magnificent specimens shot in Wurtemberg, Hesse, or elsewhere; and here may be seen antlers which make you mute with astonishment, so mighty are they in their proportions, and occasionally of such fantastic growth. To a sportsman the family portrait gallery of a high ancestral house is not more interesting than the inspection of such collection of the progenitors of the noble red-deer race.

that the hounds are kept in constant exercise; feed the game in winter, hunt out the poachers." And from the narrow space of his prison he determined how many head of game should be shot in *stalking* annually, for he would, on no account, allow the woods to be disturbed by large hunts being held. So dear to him were his various game, that his own sons might not go out to the forest without his express permission. In a letter of July 6, 1565, he allows his son Lewis to hunt in the Rohrheimer Woods, "but hereafter," he adds, "you are to refrain wholly from hunting in the said forest, nor go there without our express leave and consent."

And even in death the ruling passion has still kept its firm hold. The late Prince —— was as fond of his game as Philip of Hesse could have been; and his son has related to me, that in his last illness, and when his final hour was fast approaching, the old man called him to his bed side, and gave him strict injunctions not to think of going out after the deer.

As we read in the old legend of Tannhäuser and the Venus Mountain, where the incautious wanderer was retained by the irresistible witchery of its fair inhabitant, nor could break the bonds which held every sense captive, so it would seem that in the magic region of the forest, with its varying gloom and brightness, in the presence and fixed gaze of the noble antlered creatures lay enchantment; holding men's minds in thrall, and

leading, now driving them, by the power of its fascination.

But let us now turn to the Stag himself, and study his nature, habits, and peculiarities.

In the first three days after birth, the little animal, called a calf, is so helpless that it may be taken with the hand. The spot where it first sees the light, is generally the densest part of the forest and the most lonely ; where no wanderer, not even the solitary wood-cutter is likely to disturb the watchful mother and her newly born. During the first days, the hind scarcely leaves her offspring for a moment. It is always a pleasing, nay, almost a touching sight, to see any mother fondly tending her little one : and such cherishing love and maternal tenderness, make us even forget the presence of ugliness, and cause it to appear beautiful. But when the actors in such family scene have in themselves the forms of beauty, there is added to the glad emotions of the heart the sensuous enjoyment which grace and refinement give ; and we have a picture in every sense the most lovely that nature or art can afford.

There is lightness in the body and in the step of the red-deer ; there is gentleness in the expression ; and in the calf, whose coat is now dappled with white spots, all that we find to admire in the hind is repeated with the prettiness of infancy. It follows its mother closely, now gamboling around her, now stopping to suck ; but

at a sound from her, denoting fear or danger, it drops in the high grass, and lies there completely hidden. Until the next rutting season the calf follows its parent, not weaned as yet, but nevertheless led by her to copse, meadow, and corn field, and taught to seek its proper food. In about seven months, two small protuberances are perceptible on the head of the male calf; and gradually, in his second year, straight pointed horns shoot forth. In the beginning of the month of April, before therefore he is quite two years old, these fall off at the very root, close to the round protuberances above mentioned. In the course of the summer another horn grows up, and a brow antler issues from it, in a downward curve towards the eyes. He is now a brocket. A year later an additional point is seen on each horn, and he is entitled to be called a staggar. When another year has passed, each main stem is termed "the beam," and the whole together is worthy the name of "antler." The animal is now, and now only, a stag.* From year to year, should no untoward accident intervene, the antlers, which in summer shoot up anew to replace the old ones, increase in regular gradation, and size, and branching magnificence. When each beam is sur-

* When a stag has ten points on his head he is termed a "warrantable" stag. Formerly he was not warrantable till he had twelve, and it was expected he should weigh 300 lbs.; but as the number of red-deer grew less, men learned to abate their pretensions in proportion.

mounted by a triple-prong, the stag is denominated a "royal" hart, such ornament in the language of venery being termed the crown. Sometimes from one or both beams, another thick branch will put forth, sending out again fresh offsets, even as a green bough that is abundantly nourished by dew and luxuriant soil. Then indeed such stag is a majestic sight; a very forest of branches seems rising above his head; and as he advances towards you, you acknowledge that his presence is most imposing. Heavy as such ornament is, it is borne with all possible ease, and the head is turned on either side with a graceful motion, moved languidly backwards, or tossed skywards with a bold air, even as though the spreading branches were lightsome as a flower.

The weight of the antlers varies, according to their size and massiveness, from ten, twelve, to fifteen pounds; those of a stag of twenty-four, killed in Dessau, weighed thirty-two pounds.

This casting and reproduction of the horn, growing plant-like on the living animal, is undoubtedly one of the most wonderful phenomena in natural history. It is so curious and wonderful, that it would be looked upon as a fable were it related of a creature in a distant land, and which none of us had ever seen. And, though the stag is a dweller on our island, there are thousands at the present day who have no correct knowledge of

the process. They have heard that the stag "sheds his horn," but of the meaning of the words they have anything but a clear idea. Least of all do they imagine that the *whole* of the strong, thick, solid growth parts at the base from the spot where it grew, and drops off as a sere leaf in autumn falls dead and sapless to the earth. Nor do they know that out of the hard bone there sprouts forth, like the buds from Aaron's rod, a soft, sap-filled shoot, growing up, as the tree of a fairy tale, in a wonderfully short time, into a majestic, broad, manifold ramification.

Towards the end of February the stately ornament gives way at its base, and tumbles to the ground. But in a day or two the new growth shows itself above the surface of the small circular hard foundation, and upwards it rises, and begins to germ, till at last the many shoots develope boldly in broadest dimensions. The whole is covered with a thick velvet, which preserves the points, as yet soft and tender, from injury. These, as long as the process of reproduction is going on, are in a transition state, from porous consistency to bone, and are replete with blood. They are extremely sensitive, and the stag is very careful of the new horn. Hence at this time, in order to avoid all injury by striking it against the branches, he avoids the dense forest, and frequents young woods and low thickets. In about twelve weeks, branch, and spray, and crown,

have unfolded in full pride and majesty: each point is hard beneath the protecting velvet sheath, and the brown covering may now be dispensed with. Accordingly, about the Feast of St. John the stag rubs his new antlers against the stems of young trees, and strips off the thick skin-like rind which shielded them in



their embryo state. But this is not always done at once; and the stag may often be seen at this season with the antlers still partly covered, while in some places the new horn appears shining in its fresh ivory whiteness. Here and there, on this or that point, the velvet, not quite detached, will hang down in ribands, dangling about, like some fantastic ornament. But though the

horn, now bared of its covering, may be called hard, in comparison to its recent state, it is not as much so as it becomes later. There is a gradation in its hardness: it is, for example, not so hard in July as when, in the following year, it drops from the animal's head. Some antlers, indeed, even then, are not quite hard. The new horn bears traces of blood, its white colour soon changes into a dark brown, except the points, which always retain their lighter hue. As it now is, so it remains for a season of one year's duration, then again to topple down, and be again replaced by another prouder and statelier than before.

With each year the number of sprays increases. An additional one is put forth generally on each beam; though occasionally, when the pasture is particularly nutritious, a stag that one year had but twelve points may, in the next succeeding, appear with sixteen.* As I

* In counting the points, an *uneven* number is *never* given as the result. A stag is said to have ten, twelve, fourteen, sixteen, &c., but not nine, eleven, or thirteen points. If, for example, there are on one beam six, and on the other but five sprays, the *larger* number is *always* taken as *the half of the sum total*, which would thus be twelve. But in order to indicate that the number given was not complete, instead of speaking of such stag simply as "a stag of twelve," the word "*ungerade*" (odd, uneven) is added, which indicates that on one beam there was an odd number of points. No matter how great the difference between the number on the two beams, the larger number is to be taken as furnishing the half of the whole sum. If there were but three points on one, while the other had six, the stag would still be called "a stag of twelve," or rather "*ungerade* twelve."

have remarked elsewhere*, “The antlers of a stag are his badge, the feature by which *he is known and identified year after year*, in mountain and in forest. They are what a strongly marked countenance is among men.” And they become thus characteristic because, in the peculiarity of their original formation, they suffer no change, although the antler of each year is a totally new growth. The new horn is always a counterpart of the one shed, with the addition of two or more sprays. The form of the whole, however, whether spreading or narrow, whether elongated or of stunted growth, preserves its distinguishing characteristics, and thus, *for a series of years*, a stag is known, and, when caught sight of, is recognised as surely as we men may recognise any of our human acquaintance.† On the mountain the forester may by chance find such horn which the stag has shed; and he knows at once the very individual to which it belonged, as surely as though he had seen it dropping from the animal’s head. Occasionally it so chances that the shed antlers of one and the same stag are found for several years in succession; and you then perceive how the bold curve of the beam or the bend of

* Landseer as a Naturalist and Landscape Painter. Frazer’s Magazine, July 1856.

† As an example of this, see “Tracking the Wounded Stag,” ch. xxviii. of “Chamois Hunting in the Mountains of Bavaria and the Tyrol,” second edition.

the brow antler, or the high embattlement of the crown is each year but a fac-simile of the preceding one. The beam is stronger, the points are larger and more numerous, but the characteristic features are minutely the same.

Such good stags are always known to the sportsman and the keepers by some particular name or designation; an epithet relating either to the haunt of the animal, or being an allusion to some circumstance, trivial, perhaps, but still well remembered by the hunter, intimately connected with the noble creature. Now he will bear the name of the sportsman, who after many a weary watching at last met him at early morning, and, owing to some mistake, or from flurry or awkwardness, missed him after all. Or he will be called after his favourite haunt, and known to all as "the Rocky Glen stag." Perhaps, years ago, a bullet intended to bring him down may have merely grazed a limb, leaving however a certain lameness; and hence he will be talked of as "the limper" by every forester and gillie of the district. Nor is it impossible that the formation of his antlers may have left a deep impression on him who saw him first; and in the enthusiastic description of such magnificence some expression was perhaps made use of which elicited a roar of laughter from the assembled party. In recollection of the circumstance, that word which called forth such merry burst will be connected indissolubly with the particular stag, and he will henceforth bear it to his

dying day. And long after he has ceased to wander through his wooded realm, he will be remembered and talked about by the survivors; and the story will again be told of how he came by his droll cognomen; and the names of those will then be rehearsed who that day were present, and, in a sadder tone, of those good comrades who since then have gone to their rest.

“And did you see no stag yesterday?” may be the question put to one returned from an unsuccessful excursion.

“Yes, I fell in with a troop of deer on the glade near the beech-wood, and there was a splendid stag with them.”

“What number of points had he?”

“That I cannot say exactly, as he was rather far off; but I should say sixteen at least.”

“Were his antlers very high, and rising in a straight direction upwards, instead of branching apart?”

“Yes.”

“And the beam was dark and almost black, and the points were all extremely long?”

“Yes, very long, but not particularly thick.”

“And did you remark if the crown was peculiar, one of the long points being bent sideways in a somewhat strange manner?”

“Yes, that I observed; for as all the other sprays

took an upward direction, this single diverging one was the more striking."

"Well, 'tis the stag I thought. I have known that stag for five years. He is always at this season near where you saw him to-day. Three years ago N. N. fired at him, and missed. 'Twas a long shot though, and rather late in the evening. Well! that stag had eighteen last year, and as he has only sixteen this, I fancy he won't have any more in future. I've got the horns that he shed last year, which I'll show you. They are up at the lodge, and you'll then see that one point of the crown is bent downward and a little crumpled, and that is the reason we call him 'the Crumpy.'"

"And does he stay here after the rutting season?"

"No, then he is off at once, and we don't see him again for a long time. Last September we found a good stag gored to death close to the meadow, where you saw 'Crumpy' yesterday. He, no doubt, was the murderer; for his horns being so long, and rising nearly straight, an adversary whose antlers spread more has little chance with him. As I said, I've known him five years: and an underkeeper who was here before me said he had heard of him, as a good stag, two years before that."

Such is the matter of many a dialogue, when some noble hart that has been seen is identified.

The reproduction of the stag's horn is in itself a phenomenon; but it becomes still more curious when we know that the laws which determine its formation are directly the reverse of those which govern the growth of the horn in other animals, — in our domestic cattle, for instance. The process is a wholly different one. The horns of *oxen* are known to be more developed than those of the bull*; while the stag's antlers are the emanation of his perfect non-emasculated state. So intimately is their formation connected with the generative system, that should these organs be mutilated, the antlers suffer in proportion. They either take an imperfect, stunted form, or do not shoot forth at all. If such injury occur during the period that the stag's head, to use an heraldic term, is "armed," the animal will never more cast his horn, and as it then is, so will it remain hereafter.

Immediately before and during the rutting season an extraordinary amount of vital energy seems diffused through the whole body†, giving the impulsive force, and supplying the nutrition for so rapid a development.‡

* "It is a notorious and constant fact, that the castrate bovine has longer horns than either the perfect male or female." — *Edinburgh Review*, p. 525. April, 1860.

† An extraordinary instance of this is given at chapter iv. "Chamois Hunting in the Mountains of Bavaria and the Tyrol," second edition.

‡ From some observations in a paper on Darwin's "Origin of Species," in the "Edinburgh Review," April, 1860, it might be supposed that the

How truly and in every respect "plant-like" the germinating of the antler is, those parts not quite developed

stag's antlers were in a perfect state, or even existent at all, at the rutting season *only*; that is, for but a few weeks in the whole year. The truth is *he has them for nine months out of the twelve, and all this time they are in perfect fighting trim*. Nor are deer at all "combative." At the particular season alluded to, all animals, without exception, are susceptible to jealousy when a rival shows himself, and endeavour to drive him away. This temporary fit of jealousy, common to all males under like circumstances, cannot be strictly called a "combative instinct," or a "superaddition" to other qualities.

I hope I have not misunderstood or mis-stated any thing: to avoid doing the latter I subjoin the passages alluded to: — "In many species Nature has superadded to general health and strength particular weapons and combative instincts which, as *e. g.* in the deer tribe, insure to the strongest, to the longest winded, to the largest antlered, and the sharpest snagged stags, the choice of the hinds and the chief share in the propagation of the next generation." — Page 519.

"The antlers of the deer are expressly given to the male, and permitted to him, in fighting trim, only at the combative sexual season; they belong moreover to the most plastic and variable appendages of the quadruped. Is it then a fact that the fallow deer propagated under these influences in Windsor Forest since the reign of William Rufus, now manifest in the superior condition of the antlers as weapons, that amount and kind of change which the successions of generations, under the influence of 'natural selection,' ought to have produced? Do the crowned antlers of the red deer of the nineteenth century surpass those of the turbaries and submerged forest land which date long before the beginning of our English history?"

This last question is easily answered. There is no comparison, as regards size, to be made between the antlers of the present and former centuries; so greatly inferior are those which we have to those which have been. And it is quite natural it should be so: not only did the deer formerly reach a greater age, but they had better and more abundant

furnish convincing examples. In them we distinctly see, and can trace even, the process of its unfolding, just as in the aloe the coming leaf is perceptible while as yet immature and unseparated from the core around which it is folded, but whence it will soon be loosened; or as on a branch of ivy or of the chestnut we see the swelling rind where a fresh offset is about to put forth, so on the stag's horn the very same process may be observed. Different as, at first sight, may seem their natures, each growth presents a similar appearance: the one rooted in, and growing out of, the hard skull-bone of a living animal, and carried about by it from place to place; the other springing up out of the soft, moist, warm, fecundating earth, where endless spreading filaments hold it stationary.

Like a blossom about to burst and open, is the upper part of the beam, when the sprays forming the crown are on the point of appearing. The thick stem is swelling with a teeming germ; there is an indication of manifold new forms of life about to appear. But from some cause the further development has been checked. Nature perhaps was exhausted, and incapable of further effort; and thus the germinating ramification

pasturage than now, when the woods are cut down and the land is highly cultivated. Abundance of nutritious food produces generally antlers of large growth.

stopped in its progress while yet imperfect, when but just beginning to acquire shape and stability.

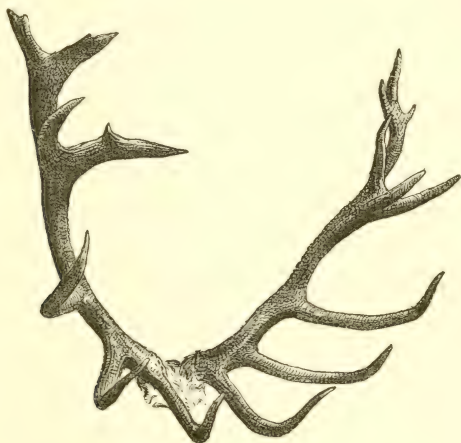
Elsewhere a new bud has begun to show itself, but before it could quite separate itself from the stem, before it could rise out of and free itself from the thralldom of the embryo state, the vital energy failed, and so it has remained in the intermediate stage, while advancing from mere soft coherency to concrete form : between unripeness and maturity. In the shaping there is present something of each state ; it is both, and it is neither. The transformation is in progress, but only half accomplished ; it is the process of crystallisation arrested before the precipitation is complete.

Here is the perfected formation, and in juxtaposition, even uniting with it, the smooth pulp-like mass that was about to become something, but which, before the faint lines and ridges indicative of a growing form could show more definite, was checked in its development by a sudden failure of procreative strength. As the ripple on the surface of the water betrays the movement of a living thing below, so here a slight undulation shows the existence of the life which was at work beneath, and which, had a few days more been allowed it, would have burst forth as a new additional spray.

It is as though the growth had been arrested by instantaneous petrification ; the working, swelling,

intermingling of a transition state, suddenly stopped; while each pulsating throb, suspended at the instant, in the very act of heaving, is congealed, held fast, and prevented from being transitory.

This is clearly perceptible on the one branch of the antler here given. An exuberance of vital energy caused the beam to grow on in unusual strength to a



height where, instead of such solid thickness, it generally becomes tapering. Here was an extraordinary expenditure of strength on this strong beam: it had shot up in massiveness, instead of dividing into many smaller branches; but nature, as though intending to make good the omission, had begun at the extremity

the process of ramification ; the juices, however, which should have furnished the necessary strength for the effort were already expended, and so we see the intention only, and not the accomplishment.

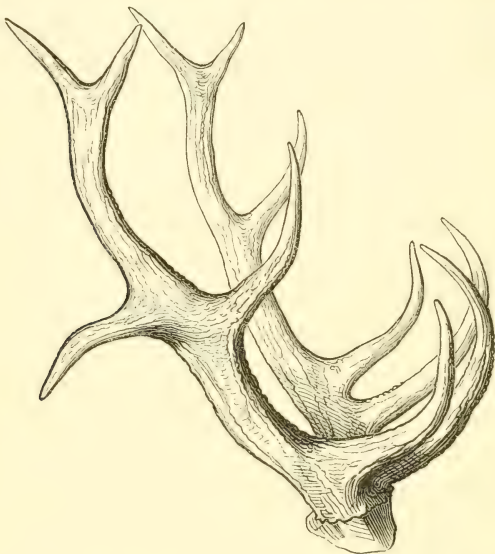
The like result may be occasioned also by an injury to the horn while in this state of growth, by grazing or striking it against any hard object. Such an accident causes that blunted or deformed appearance which is sometimes seen. The direction which nature would have given the young sprays having been thus forcibly changed, the result is a fantastic formation. And as plants and fruit trees, by stripping off some of their leaves and the least promising buds will bear much larger fruits and flowers, so that other plant-like growth, a stag's antler, will show a more than usual development in one direction, when the transmission of the living sap has been cut off from another. It is, in fact, an exemplification of that law which Goethe discovered with regard to the development of plants, and which, doubtless, he never anticipated would be applied to such a growth as we are treating of here. All the parts of the plant he found to be merely different stages in the development of the leaf. Here the whole antler seems to be but a modification of the simple spray. And, as by the application of this morphological theory to animal physiology, it has been satisfactorily proved

that all monstrosities are the perfectly natural result of obstructed development, so, too, is it evident that a monstrous formation of the horn of the stag is a symptom of such obstruction and the way in which it shows itself; and, like the abnormal birth, is the necessary and legitimate consequence of a certain preceding contingency.

A stag's antler, as may be seen in the specimens here given, will grow to an enormous size. The beams are thick, the sprays long, and those of the crown manifold. It has been said also that from some accident, while in a growing state or occasionally from an apparent freak of nature, they take a fantastic shape. But in these deviations from the normal standard a certain law is never transgressed. In humanity it is the same. We find men whose stature so surpasses the ordinary standard as to be gigantic: other individuals so small as to be dwarfs. A limb too or a sense will sometimes be entirely wanting; a member be stunted or of unusual size: but the general ruling law is never so disregarded as to show us a man with a leg growing where the arm should be; with eyes or nose placed at the back of the head instead of in front.

The ramifications of the antler may be strangely twisted, or there may happen to be none at all where we expect to find them; and the beam be thus like a bare

branch with the spreading points all collected in the crown. However we do not find additional ramifications springing from a part of the horn where, as would seem, it were contrary to nature's plan that they should appear. It is a law of nature, that after the tray antler another



independent spray shall not grow out of the beam. Others there are above it, it is true, but these belong to and form part of the crown. Nor does a point below the crown, deviating from what also seems to be a fixed law in the animal's economy, grow *backwards* instead of forwards. You may see any formation, even the most

curious and fantastic, rather than either of these particular abnormities. A thousand specimens of antlers may be examined without finding them, and yet there are exceptions to the operations of both these laws.* For the one given here I am indebted to His Serene Highness the reigning Duke of Saxe-Coburg-Gotha. The stag that bore it was shot by His Highness, Sept. 7th, 1860, in the Thuringian forest near Gotha.

When from a shot or other accident the health of the animal has been impaired, the horns are shed later, and those which succeed, instead of having more points than the old ones, are less in number than those of the year before. A proof how necessary perfect health and all available juices of the body are for aiding nature in completing the work of her short but vigorous effort.

Nor in our computation of this effort are we to have in view such antlers only as some of us occasionally see; moderate in dimension and slender in form throughout. To appreciate the procreative activity and power that is

* The operation of a law in nature may, of course, be constantly disturbed, and such is the case here. But "still," to use the words of Mr. Buckle, in that great work which forms an epoch in our national mental development, "Civilisation in England," vol. i. p. 28, "*the law itself remains intact.*" "For," to quote further, "a law of nature being merely a generalisation of relations, and having no existence except in the mind, is essentially intangible; and, therefore, however small the law may be, it can never admit of exceptions, though its operation may admit of innumerable exceptions."

here exhibited, we must see before us, we must lift with our own hands and raise into the air, the noble trophy of some chase of other days ; with beams arm-thick, and the very points of the crown even massy and of sturdy strength.*

A stag of unusual size made the woods of Homberg in the Cassel territory his haunt. He kept so hidden in the recesses of the forest that it was only from an occasional account brought by the peasantry that anything was known about him. At last, at the end of the rutting season in 1571, he was found dead in the forest, having fallen in battle with the other stags. Landgrave William had the antlers painted, and sent the picture to his brother, with the remark that they were magnificent, and with thirty-two points; and had not some been broken in the fray they would doubtless have amounted to forty, or even more.

But the one with the largest number of sprays I know of, is that still existing at Moritzburg near Dresden, with sixty-six sprays, which belonged to a stag shot by Frederick I. in 1699. The weight of the animal however did not exceed 555 lbs.

* The antlers here given are taken from the collection of Count Max Arco in Munich, who most obligingly placed the whole at my disposal, to have copies taken of whichever I might select. So many and such magnificent specimens were probably never before brought together. There are besides many extraordinary formations, and roe antlers which, for size and peculiarity of growth, I consider to be unique.

It is such a superb ramification, strong, high and spreading like a tree of the forest, that we must in thought have before us in order to appreciate fully the greatness of the wonder. And what is so extraordinary is, that great as must have been the effort of Nature to put forth thus quickly so surprising a growth, the animal is nevertheless soon after in his best condition: sleek, robust, and in the full pride of his strength.

In fitting harmony with the appellation "the noble stag," men have also treated him as a monarch, and given him a "crown;" then too calling him a "royal" hart. Nor are his movements spoken of as those of some ignoble beast. When stretched on the ground at rest we say that he is "couched:" and if he goes forth to meet a foe, it is not to fight, as a dog might do, but "to combat."

There is, too, picturesqueness in such terms: when foam is round his mouth, he is said to be "embossed." All this, tending to remove him from the brute, to raise him and give him certain human attributes, is evidence of the supreme delight that was felt in his presence and his pursuit.

A stag will often, year after year, set off at the same season to return to the spot where he has once revelled in enjoyment. He will come from a great distance, crossing rivers and broad lakes *, traversing forests and

* It is sometimes well nigh incredible how far a stag will swim. On

mountain-ranges with astonishing speed to hold his court of love. At dawn, the forester will be surprised to find the slot of a magnificent stag on the soft ground, which he had not seen before. The astonishment of Robinson Crusoe when seeing the print of a naked human foot on the sand, will hardly have been greater. For he at once perceives the stag is a stranger, and has not been there until now. He passed in the night; and he is already gone, and is far off on his way to the trysting place. On he goes, stirred and impelled by a vehement longing: and throughout the night, when men are asleep and the very earth seems to slumber, and all is silent except the rivulets, his impatience drives him onward; as there is no one to scare him, he holds a direct undeviating course; he passes close to human dwellings, and across homesteads and gardens, leaving his traces behind him; and on, too, still on, along the broad highway. He does not rest till he has reached the well-remembered spot.

Arrived there he will at first be seen in the train of a single deer, and as the others shun and hide themselves from him, he unceasingly runs in all directions with his nose to the ground, to discover where they are concealed. Each one he finds is then immediately forced to join the herd which is thus being formed,

the 27th of October 1860, a stag of four only landed on the island of Muck, one of the inner Hebrides. The nearest isle whence he could have come is ten miles distant.

and in this wise the number of his household increases from day to day. Now he will stand in the midst and look around with a listless air, then presently with an angry snort rush forth in order to drive back again some feeding deer that had presumed to stray from his more immediate neighbourhood. For this is a proceeding he will on no account tolerate : in his domestic circle he is a tyrant, and rules as one ; and accordingly he walks round and round the herd and keeps them well together. His will is to be their law, and like a true despot he expects that every inclination of another must bend to his imperial pleasure. Yet, despite his unlimited sway, he finds it difficult to enforce obedience, and he is continually punishing refractory stragglers by butting them with his horns.

At this season he likes to be alone with the herd, and will tolerate no other stag in his company. Indeed, so evidently annoying is it to him to be disturbed, that he has been known to attack people who came into his neighbourhood ; and of the instances which are upon record of men having been set upon by the male red deer, all, no doubt, occurred at this period when the stag is most irritable, and occasionally even careless of, or rather blind to, danger. His nature, in this respect, seems then quite changed ; for at other times, as we all know, an unusual sound, a slight rustle, or a strange appearance, is alone sufficient to alarm and cause him to retreat.

But now he lives in a delirium of excitement, and every feeling and instinct and habit, fear, hunger, thirst, are forgotten; they have given way to, and have disappeared before, one sole, strong, all-absorbing impulse. His neck is swollen to an unusual size with his continual bellowing; and his restless life and want of sufficient nourishment, begin to tell upon him. But hark! not far off sounds a hoarse roar. At once the enervated creature's whole mien is changed; he turns in fiery anger thither whence the audacious voice proceeded, and hurls forth in fiercer rage a deep-rumbling challenging reply. Again he sends it rolling forth in a long reverberating peal, and then in short, sudden efforts, as though he already were wrestling with his foe.

And now appears the intruder; he stops a moment to measure his enemy. The hinds look up, when forth goes their lord from amidst them, to meet the insolent stranger. He rushes upon him with all the hatred which jealousy can inspire. His mighty head is lowered, and down he charges upon his opponent, blinded with rage. Woe to him whose antlers are the shorter! If equally matched, the fight will be long and terrible, and frightful the wounds which those long brow antlers will inflict. All the ground is upturned by such a tourney. Round and round, like skilful fencers, move the two combatants, and each digs his hoofs into the earth to obtain a purchase in pushing against his adversary.

Now one manages to get a side thrust, and three long, sharp, crowning sprays of each beam are buried in the shoulder and flank of the enemy. It was a home thrust, and has decided the battle. Down he rolls on the earth, wounded to death. But perhaps even then the wrath of the conqueror is unappeased, and he may continue to vent his rage on his fallen enemy, as though he still were opposed to him in fair fight. The whole herd meanwhile is looking on and watching the encounter. Curiosity is in their gaze, and a little of fright. For it is a deadly joust, and there is a dreadful earnestness in the fierce struggle of the two combatants for victory.

The time comes at last for the stag to quit the field, and then the place of the redoubtable champion is supplied by the younger males, who, till now, had not dared to show themselves.

Before the rutting season the good stag is always to be found alone; but now he mixes with others, and with them, as darkness approaches, seeks his food in the fields on the skirts of the forest. There is, however, little to be found, for all are bare and the pastures will soon be covered with snow. He has a hard time before him; the inclement season is about to begin, and he goes to meet the winter with fleshless and exhausted body.

If the sportsman is able to imitate correctly the roar of the stag, he may, in the rutting season, entice within

shot any that happen to be in the neighbourhood.* On hearing the challenge the stag will listen, and after an angry reply will make for the spot whence the sound proceeded.†

The attachment of a stag to his old haunts is a striking feature in his character. He will repair each year to the same delectable summer sojourn, as regularly as a nobleman removes in autumn to his country seat. In the Hinter Riss, in Tyrol, was an old stag that for years took up his abode on a small flat piece of land that stood out like a shelf a few hundred feet below the summit of the mountain. There, from this commanding eminence, he could overlook the whole tract, and

* Sometimes he will approach cautiously, sometimes in full trot, and come even *too* near the sportsman. He will rush so precipitately to the spot as to appear suddenly before you; it is necessary therefore to be prepared, for on such occasions his presence lasts but a moment, and he is off the moment he has discovered the trick. When he is so stationed that you cannot approach him, it is well to imitate his roar, in order to make him leave the spot and draw nearer. But the tone should be in a key somewhat higher than his own voice, to represent a weaker stag; for if your roar be hoarser than his own, he may fear to meet an adversary more powerful than himself, and will remain where he is. Nor must you fail to observe if the stag has changed his position after replying to your roar. He will perhaps approach within a certain distance of you, and there remain immovable. In such case, an imitation of the complaint of the hind when persecuted by the ardour of the stag will hardly fail to move him.

† An acquaintance of mine—the same who figures in the story alluded to in note † p. 67—shot in this way, in the autumn of 1860, twelve good stags in ten days, in the territory belonging to Prince Lamberg in Austria.

gaze across to the inaccessible peaks opposite. I once climbed there after him, and could not sufficiently admire the glorious view over rock and winding valley and mountain stream that lay below me. There is nothing an old stag loves more than quiet, and here there was nought to disturb him. The spot was unapproachable save by one narrow path. Behind was a wall of rock some hundred feet high, reaching to the crest of the mountain, and all around was a deep abyss that ensured him from an assault. Here he used to stray about, and at evening, as the sun was sinking behind his rocky fastness, would stand and look down upon the vale.

Nor, though scared away, will a stag easily give up a path he has once chosen in going to or from the pasture. He keeps to it as though it were the sole way through the forest. Day after day he will appear at the same place and nearly at the same hour, and this exactness has enabled many a foe to lie in wait for him at his coming.

As a man who has lived long in the world becomes mistrustful, so an old stag is wariness itself. Unlike some young greenhorn, who is off at once on the first sound of an unusual noise or at sight of an intruder, he will first watch and listen. He is lazy too, and does not like being disturbed. Should he hear steps and voices in the wood, he will perhaps lie close, most watchful

though the while, and let the invaders advance even close to his very lair. Should he be sure that he is unperceived, he will let them pass by without a movement or a breath giving sign of his neighbourhood. Yet he may deem it safer not to tarry; and when you are but a step — not more — from him, he will burst out of the thicket, crash through the entangling and snapping branches, and rushing on, go thundering through the solitude. In his flight he perhaps will rouse some other game, which, scared at the suddenness of the alarm, will rush off panic-stricken in all directions.

At other times he will slowly retreat before the advancing intruder, and so quietly does he move over the ground that not a twig is disturbed, not a dead leaf rustles. On he goes deliberately, step by step, listening, then stopping, peering with outstretched neck through the bushes. Thus he will reach the border of the forest, and there with head low down and nostrils distended, and nothing moving save his eyes, he will watch if no danger be nigh. He then will gently emerge, and, pausing, look round him with a stare. But it is for an instant only; for with a light step he crosses the road and is lost in the sheltering wood.

It is such a moment which is described in the following lines.

“ Oh, that’s delight to be in the green wood,
When all is solemnly still,
And there’s hardly a breeze to move the leaves
Atop of the wooded hill;

“And watch with expectant and longing ear
 For the merest coming sound ;
 And, breathless, at last hear a rustling step
 Move stealthily o’er the ground ;

“And then to behold, with exulting eye,
 The creature with antlered crest
*Emerge from a thicket, whose leafy boughs
 Give way ’fore his broad brown chest ;*

“*And watch how with caution he cometh forth,
 And how in his pride of height
 He walketh erect o’er the sun-lit sward
 Encircled in golden light ;*

“And behold him then stand before you there
 In that still forest glade alone ;
 Not a bow-shot’s length from your own right hand,
 And to feel he is all your own !” *

I remember when out near the Danube between Ratisbon and Straubing, a number of beaters were stationed at short intervals to go through the forest and rouse the game. As it was not yet time to begin to move, they lay down, each at his station, on the moss. Thus they remained for, maybe, a quarter of an hour. I all the while was near them. Nor were they silent while they waited. Presently they moved, when suddenly a stag, which all the time had been close to us, rushed from behind a tree and was below in the vale in a moment. He had watched all our proceedings, and had remained motionless; and it was

* Ballad of the Royal Hunt in the forest of Winchester.

only on the men rising to advance, that he found it necessary to avoid the coming danger. I happened to cast my eye where he stood at the very second that he moved, but it was already too late.

In order to hinder game from passing in a certain direction, a cord with goose quills attached to it will sometimes be hung from branch to branch, to scare back the animals that might be inclined to pass that way. As the light feathers flutter in the breeze, they act as a scare-crow. I have watched a stag that, being disturbed in his retreat, passed on through the wood till he came to such a thing stretched across his path, and have seen how, instead of bounding over or stooping under it, the wily old fox walked beside it for its whole length, eyeing it curiously, as though examining what such an arrangement could possibly denote. Indeed, when you find a stag moves thus cautiously about a thicket, without emerging from it, you may be sure, although you do not see him, that he is an old fellow that has gained experience from the guiles of men.

Such a one too will be found to have many a mark of hoary age, distinguishing him from his younger compeers. The rim of horn forming the projecting base of each beam, is nearer the skull than in one whose weight of years is less: this rim, too, as well as the beam itself, is thicker and more marked with large bead-like excrescences. The crown is large, and the white

points rather blunted by use and battles. In a *very* old stag the extremities of the antler will probably not be fully developed. The hoofs, also, will be blunted at the points and have grown broad, and their rim less sharp. His eyes are dim, and just above them is a sunken hollow. Nor will his steps leave on the ground an impression in high relief; the slot will not show a rounded ball-like form, as of yore; for the hoof is no longer vaulted inside, but has grown flat. His teeth will be loose, and, in short all those unmistakable signs of natural decay will be manifest in his appearance, which are but too painfully evident in sinking humanity.

Red deer are particularly fond of salt; a taste, indeed, which they have in common with most animals. By making therefore artificial salt-licks in the woods, the game may be attracted thither in great numbers. It is recorded that in 1526 the first salt-lick was made in the woods near Darmstadt by the then reigning Landgrave. Troops of deer, 200 in number, resorted at times to the spot. On this account it was forbidden to have or to prepare any such in the forests; this right being held an especial privilege of the sovereign. But that there might be no misunderstanding on the matter, it was some years later promulgated *as a law*, and a hundred gold florins was the fine imposed on the delinquent. Indeed, one cannot but wonder how, despite all passion for the chase, men could think of demanding from

others, *who had the same devotion to it as themselves*, such partial, such irritating concessions. When enclosures were made by the nobles round their fields or young plantations, they were not to be too high, in order that the deer might pass; nor was it permitted for the palings to have points to them, lest the game should do itself an injury in leaping over. Although the right of chase belonged exclusively to the possessor of the forest, still exception was made in favour of the sovereign. Thus, in an old code it is written, “and no one shall hunt in the deer forest without the Bishop of Maury’s sanction. But if a knight shall come with many-coloured clothes, with an ermine bonnet and a yewen bow with a silken string, with arrows whose shafts are feathered with peacocks’ feathers, and with a snow-white hound with long pendent ears, led in a silken leash, such an one shall be aided to do his will, and without let or hindrance.”

We know that the chase was a recreation sought exclusively by the high and powerful of the land. It was their chief delight, and they followed it passionately, sacrificing everything to its pursuit. It was natural therefore that their dependents, who ministered to this pleasure, should endeavour by every means possible to procure for their master the greatest amount of enjoyment. * It was necessary to know where, at certain times,

* When stalking, the Duke of Hesse Darmstadt was accustomed to

the game was to be found. Their habits and instincts were studied till the knowledge thus acquired became almost a science. The signs that could betray their presence, the peculiarities which could inform about their size, were carefully noted; and thus, when not even a single animal had been seen, their exact haunt and their almost exact proportions could be asserted as surely, as though each one had been passed in review before plunging into the thicket. I shall never forget what a marvel it was to me when, many years ago, on walking through the woods of Nassau with a forester, he suddenly stopped, and looking at the ground said: "a stag had been there," and more especially when he added, "he was a stag of twelve." It seemed like second-sight thus to know, by the tracks in the sand, what sort of antlers the creature bore on his head.

This knowledge is one of the first requisites for a forester. He must learn to distinguish between the slot of a stag and that of a hind: to tell the stag's age by the impression he has left behind on the ground, and to know whether he moved leisurely or in full flight. But

give the keeper who had told him the haunt of the stag a ducat for each one he shot. These pieces were coined on purpose: on one side was a stag, on the other the lines

"I was bought and sold
"For this ducat of gold."
"Durch den Ducaten
"Ward ich verrathen."

there are other signs beside which indicate a stag's presence and serve to mark the difference between him and the female animal. The old veneurs knew and acknowledged as trustworthy seventy-two such signs. I shall afterwards name and describe a few of these, to show how the minutest circumstance, if rightly observed, may be made to afford reliable information.

At the beginning of this chapter I spoke of the seductiveness, of the enthralling power, that seemed to attach to the deer forest; to pervade its depths, and especially to hang like a spell round its majestic antlered habitant, as though the magnificent creature were not a reality, but an apparition, a charmed presence.

This influence is on no occasion so evident as when the enthusiastic young hunter finds himself suddenly confronting the monarch whose domain he has invaded. What is it that makes him then hold his breath, causes his chest to swell, as though it would burst asunder, and a tremor to come rippling on from limb to limb, till the whole body is trembling with the irrepressible excitement? Is, then, after all, the old pagan belief no fable, and *does* there dwell a spirit in the woods? *Is* that creature other than he seems to us in the flesh; turned brute in body, but not in animating soul? And *does* there look out from his eyes the human consciousness of what he was before being metamorphosed and banned in his present shape by a mighty spell, and now

longing to be free? Some witchery it is that holds us, for we are mazed, and powerless, and transfixed by his silent presence!

It certainly is a most strange influence that thus is exercised; never felt, at least in my own case, with other animals. Even when in pursuit of the chamois, however great the ardour and excitement might be, however fluttering the hope and impatient the longing, there was no tremor and palpitation: it was only in the stag's presence that I was will-less, and that my limbs refused to do their office. The creature has walked forth from the shade of the closing boughs and stopped and turned to gaze at me, but I was fascinated by his approach, and incapable of even the smallest effort. And looking full upon me he has moved past, and I was still held by the oppressive sway; and it was only when he had quite withdrawn that I was freed and could breathe again.

An indifferent person, a dolt to whom fervour on such matters is beyond his comprehensive power, will never know this "fever." And though time, that great allayer and calmer of passions, stills this excitement also, there are some in whom it is never entirely subdued. Even should you have wholly overcome it, and you return to the wood after a long absence, the first time you again behold the stag will give evidence of his power; and the old thrall will again steal over you.

It was doubtless something of the feeling I have here attempted to describe, that gave rise to many accounts of the nature of the stag, put forth as facts in old works on venery. He was treated of not as an animal to whom, as such, instinct merely was given, but as one whose nature was endued with higher powers, and with faculties bordering on those of humanity. There were other causes also which I have alluded to elsewhere.* In a volume of 1589 is to be found the following, gravely stated as a contribution to the natural history of the red deer. "In the season of their rutting, when they do fight together, and one of the twain doth succumb, he that is conquered doth serve the other as his master, and followeth him withersoever he goeth." And in the same work it is with equal gravity recorded that, "When he is wounded with a poisoned arrow, he straightway doth eat the herb dictam, and hereupon the arrow falleth out."

I cannot but allude here to the picturesqueness and great delicacy of the terms used in venery, when speaking of the stag, the different parts of his body and their functions, as well as when alluding to his instincts and their fulfilment. There is a decency in such hunter's language which does credit to the followers of the noble art. These are always still used in Germany; and in

* Chamois Hunting in the Mountains of Bavaria and the Tyrol, Chapter the Last.

former times it was the custom that whoever, among those who took part in the sport, employed other than the proper terms, should receive as punishment three blows with the broad blade of the hunting knife. If, too, in breaking up the deer a fault was committed, the same penalty was the forfeit. The delinquent had to put off his long hunting-knife, and to lay himself over the body of the dead stag, and then a hunter of high rank delivered the three blows, saying

“This is for my sovereign Prince and Lord;”

at the second,

“This is for knights, yeomen, and squires;”

at the third,

“And this what the Noble Art requires.”

While this was going on the huntsmen stood round and blew a tra-la-la on their horns.

But this and all the gay ceremony and paraphernalia are part of a time gone by: the imperious Present knows nothing of it. To read of those days when Louis VIII. of Darmstadt was accompanied in his “progress” to his hunting lodge with a retinue of ninety-five persons; or in Hesse Cassel, of the prince riding forth with “numerous followers, to whom not seldom several hundred cavaliers, and ladies, and damsels, singers, and musicians, did consort;” of the

palatial seats that every where arose on the woodland slopes, or in the woods themselves ; or when we hear of what stags were seen, of their size and magnificent antlers, it all sounds very like a fairy tale.

But *thus* pursued, the passion was as gambling in its effect : leading on and plunging its votaries in extremes, till it brought down poverty, desolation, and ruin.

In Hesse Darmstadt the finances were so deranged by it, that in 1725, when 100*l.* was wanted for certain daily expenses of the sovereign's retinue during the rutting season, it absolutely could not be procured : all that was pawnable had been pledged, and as no more cash was to be raised by promissory notes, payable at a distant period, a 10*l.* note was borrowed of an agent in Frankfort, that, at least for the next few days, the board-wages of the underlings might be paid them while attending their lord.

Landgrave William of Hesse Cassel, whose territory abounded in game, wrote himself in a letter to his brother (1575) : " Moreover, each of us entertains such a number of foresters, cooks, and servitors, that verily each mountain has its own verderer, each saucepan its own cook, and each winebutt its own cup-bearer ; and this, by my troth, cannot fail at last to work evil."

The luxury attendant on the practice of hawking in England was on a par with this: it was "the ruin of good estates," as a writer of the day remarks; "it moveth many to be so dearly enamoured of it, as they will undergoe any change rather than foregoe it." *

But the like causes and consequences are everywhere to be found; in all ages, as well as in all lands. For where men are, there, too, must arise human desires, human passions, and superstitions. It is everywhere the same, varied only by trifling accessories of habits, age, and clime. Even the belief in certain supernatural powers of healing we find repeated with slight modification. As in England, until very recently, the royal touch was deemed a remedy for the king's evil, so the blessing of the nuns of Werberg was believed to be a preservative against hydrophobia. And, accordingly, from time to time the litters of young hounds were sent thither, to have the nuns' hands laid upon them and be blessed. Since those days there have been revolutions in the forest as there have been in cities, changing all, and substituting the New for the Old. It is, no doubt, for the best; I only wish there were not so very few red deer left. The wood is deserted now, and with its inhabitants one charm has also passed away; but it has

* Brathwait's "English Gentleman," 1635.

a fascination still, ever abounding as it does in beauty, enjoyment and delight.

“The gay green wood! ’tis a lovely world,
With beauty that’s all its own :
And pleasant it is in summer time
To roam through that world alone.”

NOTE.

The antlers alluded to at page 73, and in the note, page 76, have been omitted, as it was found that a drawing of small size conveyed no adequate notion of the vast dimensions of the originals. It is not improbable that, on a future occasion, some of these splendid specimens may be given separately, and in such a way as to enable a just estimate to be formed of their proportions.

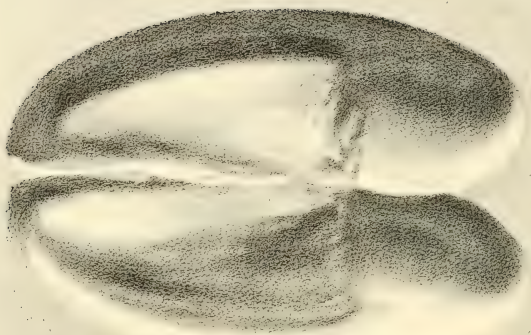
THE STAG.

PART SECOND.

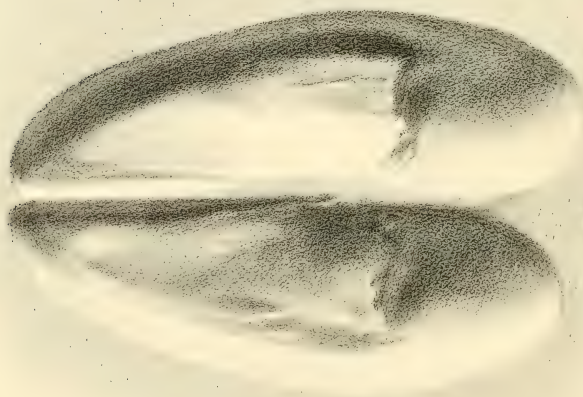
IN the foregoing pages mention has been made of a particular department of a sportman's education, to which, and very justly, high importance was attached by the veneurs of old. For they considered this was more necessary to him than all beside; and that should he have omitted to acquire such knowledge, the omission, however great his experience in every other detail, must inevitably preclude him from taking his place among those who had been admitted as followers of the "Noble Arte." Until possessed of it, the young "Jäger" could not be invested with the hunting knife, which he wore suspended at his side as the soldier did his sword. And until he bore this badge he was not considered as one of the craft; as little as a youth was looked upon as a knight, until he had won his spurs. And every sportsman was proud of such acquirement: it was his particular boast that he knew, and could interpret, each of the signs that betrayed the presence of a stag. For it required

not only long practice to be able to do this, but keen observation, intelligence, and quick-wittedness were also necessary ; and many a man whom we meet plodding on well enough in his calling, and whose understanding is considered by his friends to be rather above than below the average, would, I think, betray his natural incapacity if required to master those signs and to deduce from them the foregone occurrence. There are so many chance circumstances to be taken account of, about which it is impossible to give beforehand any rule, that much must always be left to individual ingenuity in coming to a decision. And this very circumstance makes the study I am about to speak of particularly interesting, for there is the excitement of eventually discovering, whether your premisses were well founded and your deductions correct.

Although there is no difference in the formation of the hoof of a stag and that of a hind, the slot which one animal leaves behind it on the ground is very unlike that left by the other. For the stag in walking presses the two divisions of the cloven hoof together. The hind does not. Hence chiefly the difference in the slot of the two sexes. While in the impress left by the stag's hoof the parts are strongly marked and well defined in clear relief, in that of the hind, which is slovenly and sprawling, they are not so sharply and clearly shown.



A



B

The old veneurs, as was observed in the preceding chapter, knew of and recognised as reliable seventy-two distinguishing signs. Many of these, however, were merely slightly modified repetitions of others, with new names attached to them. For my purpose, which is to make the reader acquainted with the leading peculiarities distinctive of the stag, it will be quite sufficient to take a smaller number. The others would rather serve to confuse than to instruct.

Before, however, describing the more complicated signs, it will be right to allude to the difference, in the mere outward form, between the impression left on the ground by a stag and a hind. This is the first thing to be learned, and learned perfectly. From the facsimile here given this difference will be at once perceived. That of the stag, A, is less pointed — is more obtuse in its curvature — than that of the hind, B, which has altogether a more elongated shape.*

In comparing the impression left by the fore and hind hoof of a stag, that of the fore hoof will be found to be

* In mountainous districts the slots of both are shorter, more blunted, and rounder in form than of those deer living in the plain, the hoof being worn away by the rocks and stones. In places, therefore, where such deer come down into the lowlands, the track of a hind may easily be mistaken for that of a stag. In such cases the form alone is not to be taken as a criterion, but other circumstances, hereafter to be mentioned, must be noted and attended to before coming to a decision.

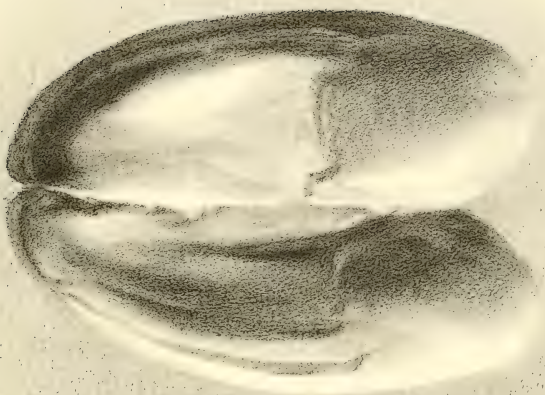
the larger. (See drawing, II, where the difference in size of the two is distinctly marked.) In a hind both are alike in size, or at least, if there be a difference, it is so small as to be quite unimportant.

In stepping along, the stag presses or rather *shoves his hoof forwards* into the soil, leaving thus on soft ground a little vaulted cavity where his hoofs were, into which you can easily put two fingers.

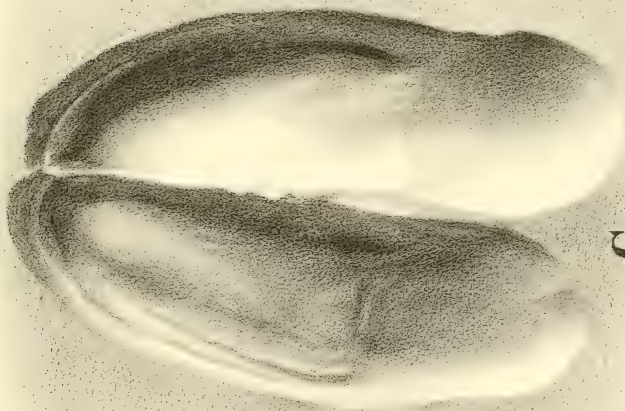
1. The peculiar manner in which the stag treads on the ground, pressing or pinching the soil together with his hoof, causes *a fine thread-like ridge* to rise in the middle of the slot he has left behind him in a clayey soil. (In German called "Fädlein."*) In the drawings A and C, this is distinctly marked; with more or less distinctness also in the other slots of the stag. As the hind does not press the two portions of the cloven hoof thus near together, *a much broader line* of clay, pressing upward between the cleft, is left behind; as in illustrations B and I, which last is the slot of a full-grown old hind. Nor is this the only difference which is perceptible. It will invariably be found that with

* Each of these peculiar signs has a name assigned it; but as I am not acquainted with any technical English words answering to such designations, I have not been able to give them; though it is probable that English veneurs had particular terms for them. If so, they would be, like most of those of the olden time relating to hunting, derived from the French. For those whom it may interest, the German name of each sign here mentioned is added in parentheses.

D



C



the stag this thread-like line bends downward *into* the hollow formed by the point of his hoof. In the hind it forms a continuous line with *the surface* of the ground, as is seen in the illustrations B, I, and M. In the slot of the stag it will never be so; and though this "Fädlein" forms an unbroken line to the very point of the hoof, the point where it ends will be always *in the concavity*, and not joining the rim or upper outer line of the impression of the hoof.

The difference is perceptible even in the slot of either animal in infancy; and the illustrations L, M, here given of each while yet a calf, show either peculiarity with great distinctness.

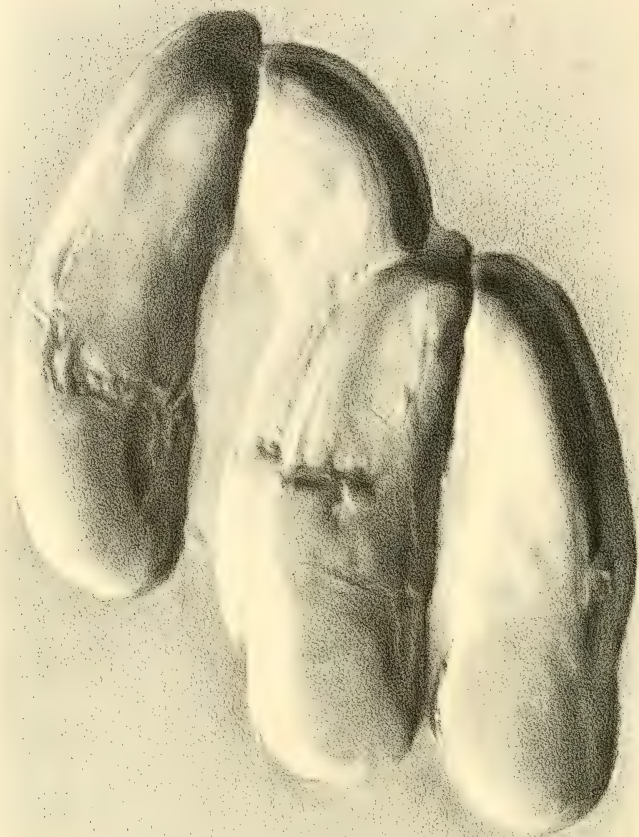
2. The stag, in stepping, treads with considerable force the rounded ball-shaped hind parts of the hoof, which are larger in a stag than in the hind, deep into the earth. This naturally presses the soil *forwards* towards the point of the hoof. In lifting his hoof *from* the ground, it is peculiar to him to press the points into the earth and shove the soil *backward*. These two opposite movements cause a heart-shaped elevation, like the impress of a seal, to be left *in* the slot. As the hind treads flat on the ground she cannot leave behind such rounded impression, called in German "Burgstall." This is very distinctly marked in the drawings A and D, as well in the slot of a male calf, L. The difference will be at once perceived by comparing drawings L and M.

3. A stag in walking turns his hoofs outwards, as we men turn out our toes. The hind scarcely ever does so. (*Auswärtsgehen.*)

4. When the stag crosses a field of grass or young corn *he cuts the shoots short off* with his hoofs, and the lopped-off blades are found in the slot. The hind, on the contrary, *crushes* the young growth with her tread, *pressing it into the soil*. If the soil be very soft or sandy, it will naturally yield, and then of course this sign cannot be found. (*Abschnitt.*) By means of these lopped-off blades of grass you may learn also if the slots are new or old. In the first case the grass will still be green and fresh: if however they are already faded, then be sure the stag passed there the night before. And it is always material to know this. If the weather is warm and the ground dry, it is difficult to discover if a slot is fresh or not; this sign therefore is, in such case, of great assistance.

5. Sometimes, as the stag places his hoof on the ground, a blade of grass gets between the cleft of his hoof. We already know that it is his peculiarity to press the two parts together: when, therefore, in taking another step, he lifts his hoof, the blade of verdure is torn off, and carried in the cleft to the next foot-print, and deposited there. This is most visible when the stag, on quitting a meadow, treads on a road or on ground free from grass. With a hind this cannot happen; for, as





E

she does not press the two parts of her cloven hoof together, the blade of grass is not pulled off when she raises her hoof. (Einschlag.)

6. It will sometimes happen that the impression made by the stag's hind foot is about a finger's breadth *beside* that left by the fore foot. This is occasioned by the broadness of his back and the additional flesh that has accumulated on his haunches. He is broader now behind than in front; his two hind legs stand farther apart than the fore legs, and consequently when he brings them up toward these in walking, they leave an impression on the ground *beside* the slot made by the fore foot, instead of *on* or *behind* it. See drawing E. This sign, consequently, indicates the presence of a stag in prime condition: one that will furnish a saddle and haunch of venison with some fingers thick of fat.

A hind when pregnant does the same, but not for any considerable distance. Moreover, as the time when the stag is in prime condition is different from that when the hind is with calf, there can be no fear of making a mistake in such a slot. (Beitritt.)

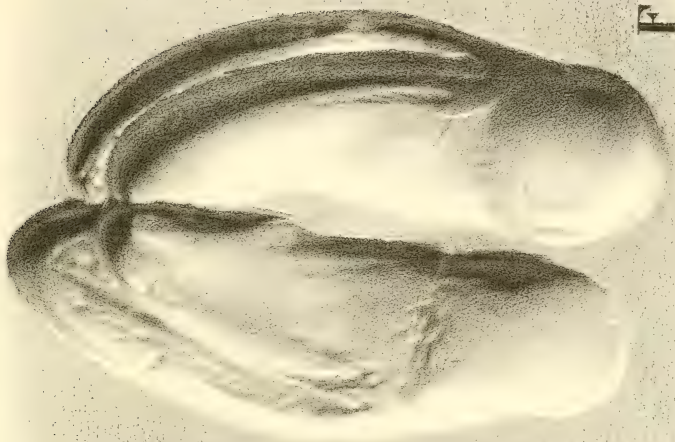
7. Another sign indicative of a very good stag is when the animal has left the mark of his hoofs, as if drawn with a lead pencil, on a stone. The great weight of the stag — and it is only a very heavy and consequently splendid animal that leaves such marks — causes the

horn of the hoof to rub off on the hard surface of the stone, like a pencil line. It is seldom seen, as a certain concatenation of circumstances is necessary to produce it. (Bleizeichen.)

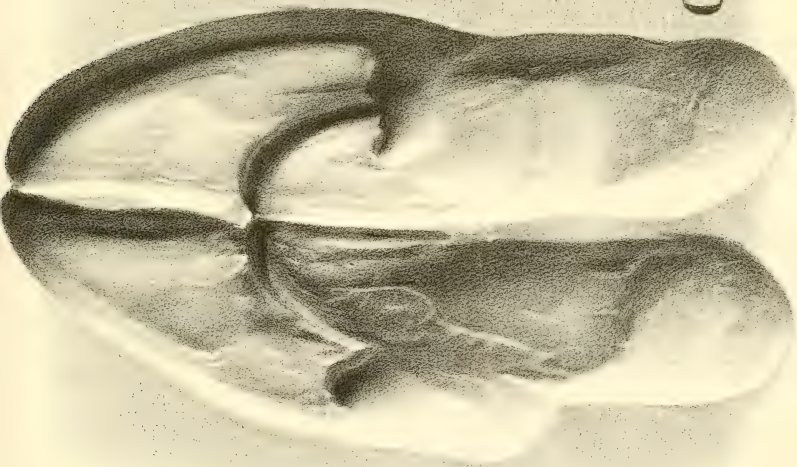
8. We have seen above (Beitritt) that the stag sometimes brings up the hind leg so as to leave an impression beside that of the fore foot. Instead of finding them *beside* each other, they may be found *behind* each other. The cause of both is the same: with the stag his being burthened with flesh prevents him from stepping out so well, and the hind is hindered by the burden she carries within her. (Hinterbleiben.)

It is curious to observe how, as the good season advances, and the stag grows fatter and flesh accumulates on his haunches, he from month to month remains further behind with the hind foot. In June when he is beginning to get into condition, he already brings up the hind foot less well in front than hitherto. (See illustration F.) A month later his limbs are still less free and active (see illustration G); and in August he is so portly of body that he does not bring the hind foot further to the front than is seen in illustration H. These three drawings of the position of the slots of a stag of twelve points, in June and July and August, show clearly how greatly the condition of the stag's body influences his walk, and how, therefore, it is possible to say with certainty, when looking at his tracks, whether

F



G



his back has already grown broad, and his ribs are well covered with flesh.

But if the two signs, No. 6 and No. 8, are *both* present in the slot ; that is to say, if the impression of the hind foot *is not only behind the other but is also somewhat to the side of it*, as is the case in drawing E, you may be sure the stag is superlatively good. Is the slot that of a hind, you may be equally sure she will soon drop her calf.

If you find this sign at a season when the stag is not in condition and the hind not with calf, you may be certain that the animal in question is very old ; for it is that stiffness in the joints and sinews caused by age, which alone has prevented either animal from bringing the hind legs so well up as a younger one would have done.

9. In passing over a sticky soil after rain, a piece of earth often remains in the stag's hoof, which he lets fall as soon as he treads on grass ground. (Insiegel.) This a hind never does.

As also he shoves his feet forwards into the soil in walking along, he is apt, when lifting them, to lift with them and *upon* his hoofs in front, a clod of the marshy ground which he is crossing, and to leave it behind him turned upside down as soon as he reaches a meadow or road. This is called the "Hohe Insiegel," and is also only found in the track of the male animal.

10. A stag occasionally treads so exactly with the hind foot in the slot left by the fore one, that a bordering line is seen all round the impression, as in drawing D, the slot of a stag of eight points. This arises from the circumstance that the hind hoof is smaller than the front one; but as this difference of size is not found in the hind, the sign in question (Reiflein) can, consequently, only denote the presence of a stag.

11. It has already been shown (2) how, owing to the peculiar manner in which a stag presses the soil backwards with the point of his hoof, a rounded elevation is formed in the slot. When the ground is soft this must invariably be found. Should it be hard, however, and dry and friable, owing to long drought, the stag will hardly be able to leave on the hard earth the mark in question. But as he pushes his hoof backwards, he will break off a small stratum or slice of the brittle earth, and leave this in the slot. (Scheibel or Scheibchen.)

12. Sometimes will be found a slot in which the hind foot has left an impression in *front of* that of the fore foot. The drawing K shows such slot left by an old hind. You may be sure it is the trace of a sick animal, or, more likely, of a young stag not worth going after. He has done this in his awkward hurry, which is on a par with the clumsy movements of one who, as we say, tumbles over his own feet. (Uebereilen.) At times the one hoof will, however, have been so little in advance of the other

K

I

as merely to make the first slot somewhat larger than it was originally. Thus, unless you are very careful, you may mistake such mark left by an insignificant animal for the slot of a noble hart. Nevertheless by observing two or four steps more, if they are to be seen, all error will be avoided. (Blenden.)

13. If in such "Uebereilen" the impression of the hind hoof be so far in advance of the front one as to leave distinct impressions of the two rounded parts of each hoof, — thus presenting four concave impressions, — you may be sure the slot is that of a stag *when the rounded impressions of the one hoof are as deep as those of the other*. If those left by the hind hoof are flat and less deep, it is a hind that has made them, and *not* a stag. (Vierballen tritt.) We have an exemplification of this in drawing M. Had this been the slot of a male animal, the impressions of the balls of the hind hoof would have been deeper, and thus *all four concavities* would have been visible. All the characteristics of a hind are seen in this slot.

14. A stag will tread with his hind foot so exactly in the slot left by the fore foot, that the impression looks like the result of a single footstep. Drawing L gives an example of this. A hind cannot well do this, or if she can it very rarely happens. The drawing I represents such "Schlusstritt" of an old hind. (Schlusstritt.)

15. Having treated of the form of the slot, attention

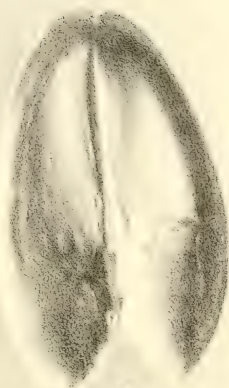


is now to be paid to the distance the right and left footsteps are from each other. Two imaginary lines, *a*, *b*, *c*, and *d*, *e*, *f*, are to be drawn through the traces made by the right and left feet, and the farther those two parallel lines are apart, the broader backed and fatter will the stag prove to be. (Schränk, or Schränken.) In a stag of fourteen, in prime condition, these lines may be $6\frac{1}{2}$ or $6\frac{3}{4}$ inches apart.

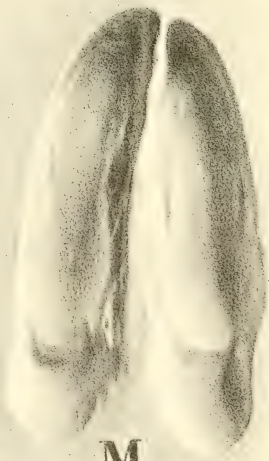
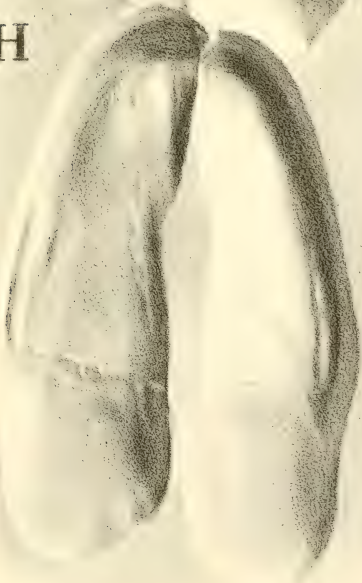
16. The length of the step, too, (Schritt), is important; inasmuch as the stag steps out further — takes a longer step — than the hind. Thus a young stag of six will step further than a full grown hind. This is a sure sign, and to be depended on. It can moreover be observed in any soil, and is therefore a means of recognition always available. What you are to measure is the distance from the slot left by one foot, to the nearest one in advance of it. Thus, any of the lines marked *yz* gives the length of step. You are to include in your measurement the length of the *one* slot: in



H



L



M

other words, you are to measure from the heel of one to the heel of the other; or from the toe of one to the toe of the other. The young sportsman, whenever he finds a slot so distinctly marked as to enable him to judge with certainty of the stag's size, should make a practice of measuring the length of step; so that by comparing the two — age and step — he may form a standard in his own mind to assist his judgment on future occasions. A stag that steps out eighteen inches will carry ten points on his head: a hart of fourteen will step about twenty inches.

These are some of the principal signs which are to be taken as guidance when examining the slot of deer in order to discriminate between the two sexes. There are other peculiarities which mark the difference; such as the impress left by the horny substance hanging behind the hoof just below the fetlock. In a stag the marks made by this are round, as from the pressure of two thumbs; in a hind they are more pointed. In a stag these diverge sideways; in a hind they are near together and hang straight downwards. They are moreover near the concave impression left on the ground by the animal's hoof. In a stag they are three fingers' breadth away from it. This is a sure sign.

In passing over moss and heather, the stag turns over all in such a manner that the roots lie uppermost.

If in a thaw it be not possible to observe a distinctly

marked slot in the snow, the stag in passing may have thrown out of his hoofs clods of snow which have collected there, and on these will be found the thread-like ridge (Fädlein), and the long rounded elevation (Burgstall) above mentioned. Or, should the ground in summer be so hard that no tracks are visible, signs of the stag's presence may be found in the wood. He will have rubbed his antlers against the stems of the trees, and the older the stag the higher will he have reached with his horn, and the thicker the stems which he has chosen.

In passing young coppices he will also break off the twigs with his antlers and leave them hanging down with their leaves reversed.

In returning before dawn from the pasture to the forest, the stag frequently "doubles:" that is, instead of entering at once, he retraces his steps, and describing a circle, then only seeks the shelter of a thicket. Thus, near its border, on the dewy grass you will see traces as though two stags had crossed the meadow, while in reality one only has entered the wood. It is therefore necessary to follow such track *its whole length*, in order to be sure whether it be the doubling of one sole animal or the returning path of more than one. Without this precaution, you might calculate on finding several stags in a coppice where there was but a single one.

Nor must another peculiarity be omitted here. The fewmets of the stag and hind are, throughout the year,

quite different. Those of the hind fall, as with sheep, separately on the ground : the stag's on the contrary are always united, and in a mass like a bunch of grapes. If a slot, therefore, be found so indistinctly marked as to make it impossible to define its character, the presence of few-mets will be a most welcome accessory, and will at once enable you to clear up your doubts.

By their state too, their hardness or dryness, you can learn whether the presence of the game was of recent date or not: in short, every circumstance may be made subservient to the one end, and, by weighing and comparing each, you may arrive at a certainty of conclusion which would hardly seem possible.

These are some of the signs by which the forester is guided in his search, when he would know where a stag is to be found, his usual haunt, his size, and the path he is wont to take in going to and fro. The size of the traces themselves*, — of the imprint left by the animal's hoof, — is naturally the standard by which his age, and consequently his size, is calculated. This foot-print, we say, is that of a stag of ten, another of one of fourteen; while all the features of a third are such that a stag which left such an impression on the ground might, we

* The drawings here given are the exact natural size. By comparing c, the slot of a stag of twelve, with d, the slot of one of eight points, the difference in size is at once perceived.

acknowledge, bear any antlers, even the most gigantic, on his head.

Although long practice will enable the sportsman to determine by the size of the slot the animal's age with sufficient accuracy, he must be careful not to overlook attendant circumstances in forming his decision. The firmness and tenacity of the soil must be considered; if hard and dry, or soddened by rain; for the impress left by a stag in crossing sticky marl, will be of considerably larger dimensions than that of the same animal a hundred yards further on, when treading on firm ground. The hoof sliding on the clay causes the slot to be longer; and if we find it round the muddy pool, its size might betray us into the belief that a giant of other days had come again to revisit the old woodland haunt. Again, the slot of a stag moving away precipitately will be deeper and altogether more considerable than of one stepping leisurely along. All is to be taken into consideration; as well when judging of a stag you have not yet seen, as when pursuing one you may have fired at, but which did not at once drop to your shot.

In examining the slots found on the ground, you are to proceed as follows. The first thing to be attended to is the form of the tracks; then look at the length of step; and thirdly observe the width between the impressions of the right and left feet.

Here are three reliable points for guidance. Should

the form of the slot have led you to a wrong conclusion, the measurements afterwards made will show you your error. Thus, as you will see later, it is not any single, separate sign which is to determine your decision, but the summed up evidence of all which is to appeal to your judgment. You must judge of each circumstance *in connection with the accessory facts by which it is surrounded*. For example, the concave impressions left by the ball-shaped part of the hoof, which sign is next to attract attention, are sometimes so alike in the male and female animal, that you might easily be misled were you to take this alone as a criterion.

Then see if the round heart-shaped elevation (Burgstall) is to be discovered. Also if the fine thread-like line (Fädlein), so peculiar to the stag, is visible upon it. You should follow the tracks for some distance, and if you find it in them all consecutively, there can be no doubt the slot is that of a stag.

And even when pretty sure you are right in your judgment, omit on no account to verify it by as many other attendant circumstances as possible. As you prove a sum by adding these and those figures together, so should you prove the opinion come to in one way, by subjecting it to the ordeal of still further comparison.

Sand, being so liable to disturbance, is not much to be relied on for the accuracy of an impression ; therefore,

where slots are found on such a surface you must look elsewhere for facts to betray the truth.

It may sometimes be of assistance to know if the trace on the ground was made by the right or left hoof. You may in general therefore take it as a rule that the *outer* half of the cloven hoof is a little longer than the other.

On mossy ground it is difficult to find any trace at all owing to the elasticity of the verdure, and you may look a long time without being able to find the slightest sign or impression. But if you have at last found the mark of one foot-step and can tell which one it was, you will then know exactly where to look for the next, and this will greatly assist you in finding it. Do not give up the search because of the soft yielding turf: go on, and perhaps you may come to a spot, where a mole has been at work; and the stag, having trod on the thrown-up earth, has left an impression of his hoof as sharply defined as the crest or motto on the seal of a letter.

And if the elastic moss which covers the ground prevents the eye from judging of the elevation or concavity that a slot presents, your touch may tell you. Lay your fingers gently in the slot, and you may perhaps be able to feel what you cannot see.

The dewy grass at early morning betrays at once that game has crossed it, and hoar frost also marks every

footstep as distinctly as a humid breath that passes over a burnished mirror.

A stag bites the grass "clean off:" a hind pulls and breaks it. You may, by this sign, be enabled to trace the presence of either animal on the pasture.

Although up to a certain age the size of the slot*, as well as the length of step, will enable you to determine how many points the stag may carry on his head, yet beyond this neither step nor other sign affords any criterion to judge by. For a stag of twenty-four is not twice as large as one of twelve; and though he puts forth so many points, thus adding to the magnificence of his presence, his body does not increase in size. When you see such a deeply marked slot full three fingers broad, you say, that stag has certainly *not less than* 14 or 16 points; and you are right in your assertion. His size and measurement entitle him to this; and though this is the least you give him, he still may have double that number in his crown.

As there are exceptions to every rule, you sometimes may see a stag with perhaps but eight or ten points, when his broad foot-marks and his long step gave you every reason to expect he would have a forest of branches on his head. It is an old saying that what

* In the slot of a stag of fourteen you may lay three fingers; but if he had twenty points on his head the footstep might, perhaps, not be broader.

the stag has not on his head, he has in his body; and you will invariably find such an animal as I have just alluded to, as much heavier in body as his antlers are deficient in size. The power thus *not* expended on the growth of the horns, seems to be so much nutrition devoted to the development of the body.

When red deer were abundant and the foresters were daily out to examine the slots of the stag; when too, there was also a daily opportunity of comparing the weight of the slain animal with that which the sportsman had deduced from the size of his traces on the ground, a degree of perfection was arrived at in such computation, which long and constant practice alone could give. In giving his report of the stags which, he asserted, were to be met with in certain parts of the forest, the young forester would often be required to state their weight: the weight, namely, that he presumed them to have after a mature consideration of their slots.

He was expected to calculate this within fifteen pounds, more or less: fifteen pounds were also allowed for the blood that the stag might lose when wounded, and if it was found that the weight he asserted the head of game would have, differed from the real weight more than this number of pounds, such mistake was looked upon as proof of inexperience and incompetency. Some stags are long in the body, while others are much

shorter and of more sturdy build.* This circumstance had to be taken into consideration, and could be judged of by the length of step ; and the depth of the footmarks in the marly or less impressible soil, gave also an indication of the weight of an animal's body.

We have now seen what accuracy of judgment was expected of the forester after examining the traces of the stag ; let us now turn our attention to the companion whose instinct was of invaluable assistance in finding them. This was the Ban dog or Leam Hound, who, held in a leash, sought in all directions till he had discovered the stag's slot on the ground, and then

* I remember that H. S. H. the Duke of Coburg, once called my attention to this fact. It was in August, 1857, when out shooting in the Thuringian forest. His Highness had shot two stags, one of twelve, the other of ten ; and when they were both brought to the spot where we sat to take our luncheon, he pointed out the very perceptible difference in the build of the two. The Duke said that he was convinced of the correctness of his assertion, that there were *two distinct races of red-deer* in the forest ; one long in body, and elegantly formed, the other short and more compact. The stags on the ground before us were evidently of different races ; there was the same dissimilarity as there is in horses of a different breed. They varied too in colour : the one stag being, as usual, of a reddish-brown, while the other was of greyer hue. On reading Landau's "History of the Chase in Germany," a few weeks ago (February 1861), I found a passage taken from a letter of Landgrave William of Hesse, 1580, addressed to Count George Ernest, of Henneberg, which alludes to the difference between the stags of Hesse and Thuringia, verifying the assertion of the Duke in this particular. The Landgrave writes about "*den hessischen Hirschen, welche nähnlich verständiger denn die groben baurischen Thuringswälder sind.*" — *Landau*, p. 251.

followed it to the spot where the game had entered the thicket. The education of this most useful hound, as well as the proper method of leading him, and directing his search for game, was an accomplishment quite as indispensable for the forester as the knowledge of the signs indicative of the presence of a stag. And as so much depended on the excellence of the leam-hound, and as so little could be done without his assistance, the greatest importance was attached to the purity of his breed, the manner of rearing him, his food, his treatment, and above all the system of his education. In all old books of venery, these matters took up considerable space. And, indeed, any one who has seen how a good blood-hound performs his task of following a wounded animal unerringly amidst endless difficulties, and is capable of appreciating such a service, will understand that, at a time when the chase was the chief occupation of the great, much thought should be bestowed on a creature so endued with admirable qualities. In order that his fineness of scent should in no wise be impaired, food that had a peculiar odour was never given him. By no means was he to be allowed, when out of doors, to snuff about in unclean places, or touch old bones, or any impure objects. He was never taken out otherwise than in a leash; and he was always to be somewhat in advance of him who led him.

As such hound was on no account to follow game by sight, or even to raise his head when on the track of an animal, every precaution was taken from the very first to prevent his acquiring so fatal a habit. His training therefore did not begin before the month of May; for as up to this time the red deer changed their coat, the hair flew about and was deposited on the brambles and bushes, the young hound attracted by the scent, would be liable to raise his head instead of keeping his nose close to the ground; and thus, at the outset, contract a bad habit. Until May, therefore, it was considered not advisable to begin his education. The state of the ground at such season was also considered favourable: it was not too damp or too dry; the atmosphere was also clear and calm, and lastly, as the month of July approached, when the course of instruction was to end, the stag gave out a stronger scent, and made it easier for the young hound to follow his track. Gentleness, great kindness, and patience were the indispensable accompaniments of such education. The hound was to be spoken to continually; encouraged if on a right scent, checked and reprimanded if on a wrong one. And when the forester had been led to the border of the thicket within which the stag lay concealed, and having ascertained this fact intended now to return, he was not to pull the hound away from the spot and roughly make him give up all further search, but *he was to lift*

him in his arms and carry him from the spot, setting him down elsewhere, away from the former track.

In order that the lord of the manor might be able to follow his favourite pastime at a day's notice, and always with certainty of success, the foresters and their attendants, as soon as the feast of St. John was come, began daily to observe and follow the tracks of the deer on the outskirts of the forests. A certain number, each with his leam-hound, had each morning betimes to make the circuit of certain thickets, and, examining the ground, to learn how many and what stags had passed at dawn. He was to avail himself of the assistance which the signs above alluded to would afford him to determine their size ; and to be particularly careful in discovering if the game which had entered the covert on one side had not passed through and left it on the other. If he tracked a stag *into* the wood, and could find nowhere on its skirts traces leading *away from* it, then of course it was certain the stag was there still. Sometimes there would be found traces leading towards, and also away from, the covert. If three times the track of a stag was discovered going *from* the wood, and only twice *entering* it, then it was clear that the game was no longer there ; and on the contrary if he were found to have entered the cop-pice three times, and twice only there were signs of his having gone away from it, then you might be sure the stag was still in the shelter of its green shade.

The haunts of the stags had thus each day to be carefully noted, and in the report delivered to the head forester was to be said what size they were : stags of twelve, fourteen, sixteen, according as might be. In this manner, throughout a whole district, however large, the number and whereabouts of the game was known ; and, when a hunt was to be held, it could at once be decided in what woods the finest harts were to be found. To make doubly sure, the foresters went out on the morning of the day to ascertain if the game was in its accustomed places ; each slot was examined and proved anew, and the stags, warrantable and not warrantable, which would in that day's sport be met with, written down with scrupulous exactness. Woe to the young forester whose account was not found to tally with the result ; on whose list more harts were inscribed than were to be found in the covert, or whose imagination had led him to give hope that a monarch of majestic size would be met with, when in reality there was but a hart of ordinary stature !

The custom of driving the game towards a part of the forest which was enclosed, was prevalent in England up to the middle of the seventeenth century. The arrangement of such hunts, and the ceremonies attendant on them, were the same as those which, up to a later period, were in vogue in Germany. There was the assembling and marshalling of the company, the signals on the horns

to direct the movements of the attendants, the *treble-mort* to announce the death of the stag, the same observance at taking the *say* of the deer, as well as the same strictness of procedure at the so-called breaking up. It was to be performed according to a certain method; and this knowledge was as much a part of the young forester's education, as the leading of his hound, or the art of distinguishing the various tracks of game. When the day's sport was over the company went to the spot where the game was ranged in order, to inspect and compare what each had slain. This procedure, like all the others, was conducted with much ceremony; and in the old ballad of Chevy Chase, this "breaking up" or "bryttlinge" of the game is not forgotten. At that famous chase a hundred fat harts had been slain by noon; and having achieved thus much,

"The blewe a mort uppone the bent,
The semblyd on sydis shear;
To the quyrry then the Persé went
To se the bryttlynge off the deare."

And it was while the Percy was looking on and enjoying the sight of the noble stags which that day had fallen before his unerring shafts, that he made the remark,

"It was the Duglas promys
This day to meet me hear:"

an exclamation called forth by the sight of the spoil,

and uttered in the exulting gladness of his heart as he remembered how the “dougheti Doglas ” had said :

“ I wyll let * that hontyng yf that I may.”

Yet, in spite of that promise, he had held the hunt ; and as he tarried to look at the result, he doubtless not only rejoiced at his success, but at the choler of his enemy when he should learn how rich had been the booty.

In concluding this chapter, which, owing to the charm of the subject, has extended to an unusual length, I have but to add that the illustrations of the tracks of the red deer have been selected from a collection of plaster casts taken by Professor Louis of Aschaffenburg. In order to insure perfect exactitude, these have been photographed, and from the photographs the drawings here given have been made.

* Hinder.

NOTE.

It is somewhat singular, that two authorities on hunting matters should differ as to what is really the length of step of a stag. The one, Aus dem Winkell, gives one and a half foot as the distance stepped by a stag of ten; while Döbell, another recognised and equally reliable authority, states it to be two and a half feet. Yet both men, from their respective measurements, arrive at the same conclusion as to the size of the stag whose slots are before them.

In measuring on the sand the length of step of a man or other biped, a diversity of opinion cannot possibly arise as to the mode of proceeding; for as he has two feet, you *can* only take the distance between any one footprint and the other next it. But the stag being a quadruped, and one, moreover, that does not plant the right and left foot directly behind each other, like the fox, a possibility is afforded of a second method being adopted. Thus some, as Döbell did, measured from one slot *to that immediately before it on the same side*, and gave the distance, two and a half feet, as the length of step; while others judged, and rightly so, that the distance between a footprint and the one *diagonally* in advance of it, was the true length. This latter method would give one and a half foot as the length of step of the same stag.

That Aus dem Winkell is correct, and Döbell not so, is evident: and we can demonstrate it to ourselves in the following manner. If we go on all fours, and thus, quadruped-like, move along, we see at once that it is the distance between our right and left hand or the right and left knee, as they move one after the other in creeping along, which constitutes "a

step." *For by so much do we advance* each time : just so much and no more. And were we to mark the length on the floor, such mark would answer to the *diagonal* lines shown in the slots at page 108.

It is not the space between the *right hand* in advance before us, and the *right knee* not yet brought up but outstretched behind us, which we should measure ; for *that*, surely, we could not call the step.

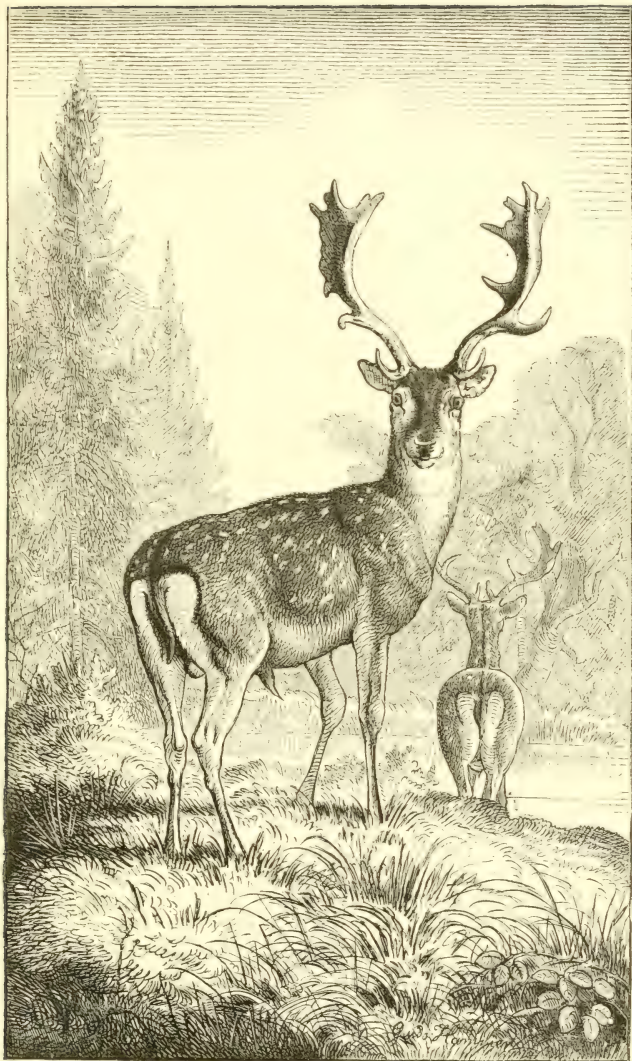
This explanation will, it is hoped, make clear to the reader how a difference of opinion could have arisen. It may also serve to make the drawing, page 108, perfectly clear and intelligible.

THE FALLOW DEER.

Cervus dama. Linn.

THIS befitting ornament of our English parks will be familiar to most persons. The fallow buck has not the imposing air of the stag, for it is much smaller in its proportions; and besides, that expression, not only of the head but of the whole body, is wanting which gives the male red deer such commanding dignity. Nevertheless, when in the fifth year the buck's antlers are fully developed and, expanding, broadly rise high above his head with a bold sweep, the animal produces a fine effect as he stands at gaze. When the pasture is rich and plentiful the antlers thrive as well as the body, and attain considerable dimensions. Their flat plates make a noisy clatter when struck against others; and in October, when the males are fighting, the sound may be heard a considerable distance as the broad surface of the horn comes in collision with that of an adversary.

With fallow deer the rut is of shorter duration than with the red deer. Hence, the buck is never in so emaciated a condition as the stag when the rutting



FALLOW DEER.

season is over. But as long as it lasts the flesh of the fallow buck can hardly be eaten, so strong is the flavour which during these few weeks is imparted to it. While alive, too, the animal has now a goat-like smell. Indeed, in more respects than one, the two animals resemble each other. Their bleat is similar, and in the appendage of the tail and its continual whisking there is also a likeness. Instead of moving over the ground with a light stately motion like the red-deer, they advance by a succession of short ugly jumps in the air, like the frisking of a kid. But notwithstanding these deformities a fallow deer is an extremely pretty animal; and its sleek dappled body, and small head, and watchful look always make it a pleasing sight. To see a brace of good bucks at rest under the shadowy branches of a venerable oak is, I think, a delightful picture, and has for me a quite peculiar charm. In summer time, when the flies are troublesome, a deer will sometimes seek a cool spot under a shady bank or green knoll, and, half buried in the high grass and tall flowers, sit there in idle indolence a whole afternoon. I have frequently stolen upon such *dolce farniente*, and from behind the stem of a neighbouring tree watched the gentle creature enjoying the quiet and the coolness. The delicate ears were in constant motion: now a long-stemmed flower would bend and rock in the breeze, or sink down with the weight of some clambering beetle above the animal's head or body,

and, as the dancing thing moved to or fro, it would play with it for pastime: or, if a bee came humming among the flowers, the noisy intruder was watched with a droll inquisitive look. Nor would it easily take fright and leave the pleasant retreat. At intervals some distant sound might cause a sudden cessation from play and a moment of listening attention; but alarm was soon dissipated and the repose enjoyed as unconcernedly as before.

Fallow deer are of various colours, red, black, and white; the red however are most frequent. Occasionally one or two white deer will be kept for the sake of rarity; but where poachers are it would not be advisable to have many, as, on account of their colour being visible at night, they form a good mark for a shot in the darkness. The bucks, unlike the red deer, herd together: they get extremely fat, and in the good season their backs and sides are as broad and round as those of an animal purposely fattened for the market. They then will often not give a drop of blood when wounded by a bullet; and you may follow the slot of the animal for a considerable distance without finding any token of its having been wounded, till at last you come upon it extended on the ground quite dead. The fat closes round the wound, and prevents the blood from oozing out. Like the stag, when in prime condition, they soon get winded, and move about as little and as

dilatorily as possible. If such a fat buck is scared, you see at once by his motion how little adapted such portliness is for speed or agility. But they are brave, as their battles with each other sufficiently attest; the formation of their antlers, however, prevents fatal results occurring as frequently as in the combats of the red-deer: with these, the terrific curved brow-antlers often bring death.

The sight and hearing of fallow deer are quite as good as of red deer. They are, moreover, extremely attentive and watchful, so that it is difficult to stalk them. Directly they perceive you approaching stealthily and with evident caution, they take alarm; and, after gazing a moment, and a sudden sound of fear, they bound away to the next thicket. The best method of getting into their neighbourhood, is to walk on seemingly quite careless whether they are there or not, humming a tune, or, if in company, keeping up a conversation the while. They then appear to be put off their guard, and to suspect nothing.

No animal I have ever met with seems possessed of such tenacity of life, such utter indifference to wounds, as a fallow-buck. It is quite astonishing to see how little effect a number of bullets will have upon him, as long as no vital part is struck. Once in Suabia I was out in the morning, after a day's shooting, to look for a buck that had been wounded. I found him quietly

grazing and seemingly very comfortable ; and yet when I shot him, I found so many bullet-wounds in his body, that I should fear to give the number lest the statement might be pronounced a fable.

This reminds me of a circumstance which shows in how strange a manner a bullet will sometimes be diverted from its original direction into a quite different one. I stalked a particularly fine buck and fired. He bounded away, and I went to the spot where he had been standing to look if there were any traces of blood upon the grass. I could find none. As the buck had stood close to a plank paling when I fired, I examined the boards to see if I could discover the mark of my bullet on any of them. I presently found the round indenture it had made ; for it had not gone through the board, which it certainly would have done had it not first struck some other intervening object. I still followed the traces of the buck in hopes to find proofs that he was hit, but always in vain ; when, on looking up, there sat the buck, with head erect and still alive, some hundred yards off. He therefore had been hit, though no blood was to be found ; and my bullet having passed through his body, had made but the slight indenture on the paling beside him. Another shot and he rolled over quite dead. On examination I found that my bullet had struck high up a little behind the shoulder ; but on turning him over could not possibly find where

the bullet had passed through the body. Every search was vain; yet passed it must have done, otherwise it could not have struck the plank and left its impression there. It was most enigmatical, and began to appear inexplicable, when, on looking at the neck a little way behind the ear, I found the spot where the bullet had egressed. It had entered the right shoulder, and having touched a bone, had gone off in a slanting direction the whole length of the neck, and out behind the left ear.

When the park of Eichstädt was given up after the death of the Duke of Leuchtenberg, all the game was shot, and one of my acquaintances having received permission to kill a certain number of deer, he spent some days there for the purpose. In the park is a diversity of scenery, meadow, upland, rocks, water, &c.; and as a fine white fallow buck was standing perched upon a stony slope he fired, and brought him rolling down to the foot of the declivity. He had been examining his prize some time, when the buck rose and got clear off; and it was only on being followed by a hound and brought to bay that he was again sent rolling over by a second shot. And yet the bullet which had struck him was found to be well lodged, and might reasonably have been expected to prove immediately fatal.

But the most strange occurrence that has happened in my experience is that circumstance related in a note

in my work on Chamois Hunting; and I transcribe it here for the information of those to whom the book in question is not known.

“The strangest sight I remember to have witnessed occurred with a fallow-deer—a buck. I came suddenly upon him while grazing in a glade, and fired. I looked to see the result of my shot, but he neither fell nor dashed away. In a moment, he began rocking to and fro where he stood. I went towards him, but he took no notice of my approach, and continued the rocking motion as before. I pushed him with my hand, and he rolled over and was dead. The shot-hole was quite round, and showed no redness; not the least sign of blood was visible, and the opening was filled up by the chewed grass on which the animal had been feeding.”

On all occasions when the deer does not drop at once it is advisable, unless you see that it sickens and moves but slowly, to leave it quiet and unpursued for some hours. You thus are more likely to obtain the wounded animal; for, left to itself, it will surely lie down before long, and there remain unless roused and forced to go further. When, however, fallow deer are frightened merely, the herd will continue their flight for a very considerable distance, still going on as if there were no safety but when far removed from the spot whence they were first scared. In this they are different from red-deer. These halt after a time, and,

watching, wait to see if there is danger of further pursuit.

You may always perceive if your shot has told by observing the tail of the particular animal fired at. Fallow deer always carry their tail in the air as they scamper along unscathed over the ground, but if wounded it will invariably be seen hanging downward.

As was observed above, fallow deer are very quick-sighted; while grazing, however, it would seem as if they heard less quickly than at other times. For it is often astonishing, if the wind be good, how near they may then be approached without their perceiving you.

It is not a little strange that when running away from real or fancied danger, a sudden sharp whistle will at once make them halt. This characteristic they have in common with chamois; these, when bounding over the rocks so as to make it impossible to get a shot, a quick abrupt cry will almost certainly cause to stop and look round; and though pretty far, perhaps, you now may fire, as the object aimed at is for a moment not in motion.

When fallow deer are unable to make out what the object or the sound is that disquiets them, there is no animal in which the signs of uneasiness are so evident. There is positive *nervousness* in their manner and in their disturbed gaze and restlessness: there is nervous-

ness in each quick, short, sudden movement, and fear in the abrupt discordant cry which terror forces from them. They are so terrified that at first they do not think of taking to flight.

The rutting season being in October, is consequently one month later than that of the red deer. A fallow buck sheds his horn in April; also a month after the stag loses his antlers. Here we have another proof of the close, the intimate connection between the generative force and this periodical development; and we see how the growth of the one is dependent on the progress and fullest strength of the other. The highest virile state of both animals seems to be when the new antlers have attained maturity. Within a certain time after such ripe state and proud lustiness of body, the branching growth becomes sapless, and makes room for another to spring up in its stead.

It may be well to compare these remarks with the concluding part of the chapter on the roe.

THE CAPERCAILE.

Tetrao urogallus. *Linn.*

THIS fine bird is nowhere found in great numbers.* It has a home in all parts of Europe where the ground is not one unbroken level; for hills and uplands seem to be the necessary condition of its existence. In the coldest regions even it is indigenous, and in Siberia it thrives and is met with frequently.

The bird, therefore, is a hardy animal, and its moderate increase is not owing to ungeniality of climate, or any difficulty of finding healthful nourishment. Many have been brought of late years to Scotland, and been turned out in the woods in the hope that these would gradually be peopled with them. But, I believe, the anticipated increase has not answered the expectations raised. There are several reasons which prevent their

* Also called Cock of the Wood, Cock of the Mountain. In some years two, in others five, sometimes eleven cock birds were shot in a district, and at present the Electorate of Cassel is well stocked with them. In the Oden Wald the capercaile seems to have abounded in 1651. Eight birds were forwarded to Frankfurt on the Maine as a contribution to the feasts held there on the occasion of the Emperor's coronation.

augmentation in the same ratio as that of other birds. One is that the hen builds her nest, if the rough construction in which she deposits her eggs is worthy such name, on the ground and in exposed situations; so that they are as liable to be stolen as destroyed. The young brood is for an unusually long time unable to fly: hence it is exposed to continual depredations, and birds of prey and other animals manage to thin its numbers. If pursued by a dog, it will take tree, and from the branch look down on its pursuer with such a fixed gaze as to be unconscious of the approach of a human foe; who, while the bird is staring downward, easily gets near and shoots him from his perch. The hen too, when sitting, will hardly move from her nest, though an intruder be close at hand.

Another circumstance may account satisfactorily for the slow increase of the capercaile. The cock is so extremely jealous that he will allow no rival in his neighbourhood. Nor will he permit a single one of his chosen fair to quit his court. The old bird is a despot, and his jealousy grows with his age. He is the terror of all the young gallants around; and as long as he is unscathed, pairing-time is for them a word without a meaning. Such old cock "keeps company," in maid-servant phraseology, with a bevy of hens, and many of them have nothing more than his company; but they nevertheless are not permitted on that account

to listen to a younger wooer. Hence the broods are few, and smaller than would be the case if the hens were more justly apportioned, and, instead of being forced to remain with an enfeebled master, were distributed among the robuster cocks.

The capercaile is strongly built, and his glossy dark plumage, varying in hue, gives him a handsome appearance. His yellowish short beak is much curved: the nostrils are fringed by a border of short black feathers. The head is of a bluish black colour, varying its tint like shot silk, while from the throat a sort of collar of black feathers hangs pendent. Around the eyes are bare, wart-like, red excrescences, which vary in size with the bird's age. The lower part of the neck as well as the breast is like gleaming blue steel, but the rest of the body is for the greater part quite black, here and there a greyish feather showing itself among the rest. Those of the wings are brown shaded with black, and on the middle joint of the pinions a spot of snowy white is observable. The long feathers of the tail are black, bordered with brown and spotted with white; and when they are all spread out and upwards like a fan in the ardour of wooing, the lines on them are as regular as though drawn with a pair of compasses. The feet are feathered with a downy, dark, rusty-brown plumage interspersed here and there with white spots. Such bird weighs twelve or thirteen pounds.

The hen is so different from the cock as to require a separate description. Her beak is of blackish colour : the throat and breast of a rusty red, and on the breast itself some white spots are sprinkled. Below and on the belly reddish brown predominates, with dark brown spots. The feathers of the tail are crossed with bars of red-brown colour.

The haunt of the capercaile is in large fir forests upon hilly ground. It is also found in forests of deciduous trees ; but, as soon as winter is come it flies off to the dark and denser pine woods, to return again to its former home when spring is about to appear. The whole day the capercaile remains in the thicket ; but, in the evening, in order to be safe from all enemies, it flies to roost up into a neighbouring tree, with a great rustle and fluttering.

The habit enables the sportsman to learn his whereabouts. But for this, it would be not so easy to find and to get near him ; for the capercaile is a shy bird, and conceals himself in the thicket and underwood.

But there is a time when, for some moments at least, his usual shyness and timidity are overpowered by other feelings ; when, blinded by passion, he allows a foe to approach towards him unnoticed and unheard. This is in the pairing season, which begins at the end of March or the beginning of April, according as the weather may be favourable or inclement.

In order to learn where the bird is to be found at morning, it is necessary to be out in the wood before night-fall, that the exact spot may be known where he has perched to roost. The tree he has chosen on one evening he will resort to again on succeeding nights; and during the pairing time it is almost always on the very top of some tall pine, though not unusually also on a side bough, that he takes up his quarters for the night. At this season if there is anything going on in the wood greatly to disturb the quiet of the spot when the birds assemble, they will leave it entirely for some other fitting place, and the least intrusion is sufficient to make the cock bird change his roosting place from one tree to another. No noise, therefore, is to be made when nearing your look out; and when once reached you must keep still and quite concealed from view.

It is getting late. The whole region is gradually becoming more still: the very murmur of the forest is hushed, and nature seems dropping into a tranquil sleep. On the rising ground where you are, the sound of a distant village clock, as it slowly strikes the hour, will reach your ear; and presently the Ave Maria is rung from the belfry tower. A rook or two straggling homeward will utter a harsh caw as they fly over your head, and the sound jars, and you feel how deep is the repose around, how placid and how calm. Now and then there is a rustle, as some bird creeps closer in among the dark

foliage, or as a mouse or other small creature runs along over the crisp dead leaves which bestrew the ground. The evening bell is heard no longer; a last "chirp" is uttered by some belated bird: the lingering streaks of light have grown pale in the sky; the evening star is already visible, and a grey tint is spreading gradually over all. There is a growing dimness in the air. Nature is already asleep. You are in a realm of profound repose, of perfect rest; and it is so strange, so unlike the world of your daily experience, you feel that some great influence must be present, thus so perfectly to have lulled and made so motionless. An undefined sense of awe has sunk into your heart, and you stand *and listen to the silence.*

Suddenly you start, for not far off is a rush, and a fluttering and beating of wings, and you look round and see a large black bird rising from the bushes, and alight on a tall fir. There is just light enough to see him distinctly, and you note the tree well; then waiting a little till a deeper shade has fallen over the landscape, in order not to be seen by him yonder on the tree-top, you bend your steps homeward through the solemn forest.

Towards morning — but long before dawn — at two or three o'clock generally, and while the stillness yet weighs upon the earth like a superincumbent thing, the cock awakes and begins his peculiar call. Though

low in tone, such an absolute quiet reigns, that it is heard distinctly even when you are not close to the bird.

Before this begins, however, you must be near the tree you noted so well the preceding evening. As it is still night, there is some difficulty in discovering any object; and only the dark undefined outlines of large masses like trees can be discovered as you peer upward, and your vision grows accustomed to the darkness. But, hark! from a distance you hear a sound which, did you not know what it was, you surely would never interpret. From a tree-top it comes across to you through the air, sounding something like a person pronouncing "tut, tut," gutturally, in the *depth* of his throat, or as if two pieces of hard wood were being knocked against each other.

Well, that's a cheering circumstance; for, though you knew he must be there, you were not sure if he would call or not, and without that there were no possibility of approaching him. And after rising at midnight, and a walk of some hours through the wood, and a cold hour's watching before the dawn, it is vexatious to hear nothing; and still more so when day is just breaking, to distinguish the dark form of the capercaile a hundred yards distant on a projecting bough.

But this morning there is no cause for regrets, or lamentation, or complaint. You are at your post

betimes, the bird is not far, and he has begun his love-call; and that is all you can desire. He repeats it often, too, and quicker, and more quickly, and you have a foreboding of success; for such accelerated utterance betokens that the sweet frenzy possesses him, and that love and its madness are blinding him, even as they blind men. The guttural "tut, tut," is followed by another, not unlike the smack *with the tongue* one curious in wine will give after having tasted a sort which he finds superlatively excellent. This is repeated a few times, and then comes a changing, now louder now lower sound, resembling a long drawn-out "whish," or that gliding sound which a scythe makes in sweeping at morning through the heavy dewy grass. This is the close of the call; and while he utters it he spreads out his tail like a fan, the wings, quivering with excitement, are extended downward, and with head outstretched, and all the feathers round the neck standing on end like a ruff, he pirouettes on his perch, or goes sideways to and fro the whole length of the branch. It is during this finale that the bird may be approached, for while the fit is on him, while the ecstasy lasts, he sees and hears nothing.

This is the moment therefore to be taken advantage of. You must listen to his call, and the moment the second note, the smack of the tongue, is over and the "whish" has begun, you may quickly take three strides



THE CAPERCAILLE.

but then stop: suddenly stop and remain as immovable, whatever your position may be, whether painful or commodious, no matter, as though you were rooted to the earth. Wait thus till he begins again, and at the moment when you may move in safety, jump forward with two or three bounds again, and so on, till you have come so near that he is within your reach. You must always manage to have finished your movements, and be again stationary, *before* he has completed his “whishing” sound; for if he be ready before you, your motions will attract his attention, and he will fly off.

It is dark as yet, perhaps; you may have much difficulty in making out his form among the dark tufts of foliage, and he may be seated so as to make it impossible to get a shot except through intervening branches. Or before you can discover him, he may have flown down to the hens, who, attracted by his voice, have come forth from the bushes to meet him. For as soon as day appears he leaves his high look-out to alight on the ground and to revel in voluptuous enjoyment. In company with his hens he afterwards flies into the wood, but keeping however always in the neighbourhood of the pleasurable spot. The hens when they hear the call of the male bird answer him by a low intermittent “cack, cack,” and then come forth from their shelter with a certain prudery.

Should you happen to fire at and miss the cock just

when he is trailing his wings and quivering with the intensity of his passion, he will probably not take wing, nor will the report or the shot that fly around him disturb him in the least. He will not have heard it, so entirely is every sense then merged in the one. An old German writer says, "Should the sportsman fire at and miss him while uttering this cry, he cares not for it; *fancying it to be a thunderstorm or a tree that has been overthrown.*" Indeed so indifferent is he at such moment to circumstances which at every other time would at once scare him away, that I have known two cocks shot within ten minutes of each other, so near were the trees together on which they were perched. It takes a good charge of coarse shot to kill the bird, for like all animals at this particular season he seems possessed of extraordinary vitality. Though wounded, unless he drop at once, there are many chances against your getting him. But as I have elsewhere remarked of other animals, this tenacity of life in the rutting season is a striking phenomenon. Indeed it were a most interesting subject for minute scientific inquiry. The excited state of the nervous system is, without doubt, the cause: and this again exercises an influence over the whole organisation. In the human subject we also observe an insensibility to pain when a certain degree of excitement has been reached: and men half-maddened by drink will receive blows and bruises from falls

with an indifference which clearly shows they are unconscious of any hurt. In the enthusiasm of a battle, wounds we know are often received without being felt. Here, as with the lower animals, an over-excited state is the source of this indifference to bodily injury; with them however it arises from one particular excitement only; and it would be curious to discover how and in what degree the feverish, electric state, the state of tension in which every nerve and fibre then is, can make the effect of a severe injury less likely to prove fatal. It would almost seem as if, at such times, nature suddenly supplied, by her own mysterious alchemy, new forces to sustain the ebbing life; and sent into and through every muscle and nerve and vein a subtle searching fluid to rouse the sinking will and give again vigorous power and endeavour.

The pairing season lasts four or five weeks. As soon as the birch trees begin to bud it is over. The cock then ceases to utter a sound in the morning, and unless you hear his call, it is impossible to approach him.

The listening for the bird at evening, the expedition during the night to the spot where you know he will be, his call at early morning, the pleasure of watching him as he moves round in his stately love-dance, as well as the hopes and fears attendant on the second or two of your intermittent approach—all tends to make the pursuit of the Capercaile one of interest and excitement.

There is a curious peculiarity of the bird which must not be unnoticed. When shot, in the last throes of death, he swallows his tongue, or at least draws it so far back that it is discovered with difficulty. This is the reason that old authorities affirmed he had no tongue. In the palate there is a pointed recess, in which the tongue lies. It has not yet been found out whether the above-mentioned circumstance occurs *only* in the pairing season, or whether the tongue is swallowed also before expiring at other times as well. I am inclined to believe that the peculiarity is incident to this particular season, when the tongue, being already drawn far back in order to produce the smacking sound of the love-call, by a convulsive twitching caused by fright and the agony of death, is thrust down the gullet, and thus escapes observation. If any one will try to produce the sound with his tongue, he will find that it is necessary to double and turn it far backwards; and if, from any hidden cause, a spasmodic movement should carry it further in the same direction, he will understand how such spasm may cause the phenomenon in question.

In Germany the tongue of this bird is considered by many an excellent preservative against the pains of dentition. Sewn up in a little bag it is hung round the infant's neck, like the well-known "Anodyne necklace" with us when a child is cutting its teeth.

THE BLACK COCK.

Tetrao Tetrix. Linn.

—

ACCORDING as the climate of a country differs from another, as its surface is varied by dense forests, bare plains, or is hemmed in by mountain ranges, so also will differ the various in and out-door arrangements of its inhabitants. Their amusements, too, are equally influenced by natural phenomena, and not only as regards the mode, but also the season, of their enjoyment. This influence extends itself, as a matter of course, to the pursuit of game; and again, as a species may be thinly scattered over, or abundant in, a country, so also will there be a difference in the time and the manner of its pursuit. A game-law, whose non-observance in the north would merit severe punishment, might be disregarded in a southern clime, not only without damage, but even advantageously. To shoot a fox is in England looked upon as an atrocity; but to do so in a country where they are not *and cannot be* hunted as with us, and where, moreover, they are so

abundant as to become dangerous enemies, is neither atrocious nor unsportsman-like. You must employ different tactics with your game in the dense jungly forest, and in the pleasant vistaed beech-wood; and if you are desirous of bringing down the male animal only, your "season" must be modified by that animal's peculiar habits. Accommodating yourself to his movements, therefore, your campaign begins when he is sure to be wandering exposed on the mountain-top, or in the shady lowlands where brooks are near; or perched, like a weather-cock, on some tall fir just as dawn is creeping up the eastern sky; or dancing his mad love-dance, as though bewildered, on the sparkling fields of snow; or, in short, doing this or that, here or there, as the instinct of whatever animal it be may prompt.

Thus on the European continent many animals are lawfully pursued, when in England it would be illegal and held to be unsportsman-like to hunt at all. Then, too, the modes of warring against the different fowl, for example, that inhabit the forests or the mountains, are as distinct from each other as the game itself is distinct in species. Every one of them has a peculiar charm, its exciting moments, and characteristic attendant circumstances. Thus the pursuit of the capercaile is totally unlike black cock shooting. Each has passionate followers, and each, by its particular votaries, is pronounced the supremest of joys.

Once, when waiting in the Fichtel Gebirge till the daily snow-storms should cease, and so enable me to go out with my gun after a splendid cock of the wood, for love of whom I had travelled many a weary mile, I sat down and chatted with the son of the forester about the woods and the mountains, and the brave creatures I had hunted there, and many other matters thereunto belonging. And he listened to tales of the chamois, and of the delight of moving along the mountain-ridge in pursuit, and of the vast realms that were there — eternal solitudes — and of the chasms you had to pass, and of the dangers that beset your steps, so that you stepped among the crags and across the snow-fields with Death ever as your companion;—he listened to all this seemingly not without interest, yet when I had finished the recital, he replied: “Well, I dare say it is pleasant enough to be after a good chamois, and to bring him down at last; but what is that compared to waiting for the black cock, and hearing his call, and to watch him fluttering round and round, and to listen to the rush of his wings? Why, there’s nothing like it! The mountains, and the chamois, and the red-deer are exciting enough, no doubt; but, for my part, I cannot think the sport can approach even in its delight that of waiting at dawn in longing expectation of my favourite black cock’s chuckle! No, no, there’s nothing like that!”

I do not share his enthusiasm in this matter, though I grant the sport is pleasurable, and, what is always most interesting, affords opportunity for witnessing leisurely the habits and developed instincts of a wild, uncurbed, free, nature-impelled creature. And the method of it, as well as those features which afford no small delight, it is my intention to describe.

But first, a word or two about the bird itself. Black Cock* are found in all northern countries more frequently than in the south. In some parts of England they are very abundant; also in Scotland, Norway, Sweden, Podolia, Lithuania, Courland, Esthland and especially in Volhynia and the Ukraine. In Thuringia there are more capercaile than black cock.

The cock is a fine bold-looking bird, and the gleaming steel-blue tints that play in his black plumage, the scarlet circles round the eyes, and his animated look, make his whole appearance most attractive. The older the bird, the more this blue tint spreads over the body. There is a bluish star in the centre of the eyes. The scarlet border which surrounds them grows broader in the pairing season and more swollen.

Short as are the wings of the black cock, its flight is rapid nevertheless. It mounts pretty high at once, and

* In Scotland it is called Moor cock, in Germany *Birk-huhn*, Birch-cock, from its predilection for that tree; being always found in places where it is more or less abundant.

flies far before alighting again. In rainy weather it seldom mounts on the wing. These birds are rarely to be found exactly at the same spot, but they are never very far from a haunt once chosen. In winter they seek shelter in the dense woods, but their favourite resort is coppices, in order to be near the seed-fields. In winter they feed on the buds of numberless trees and bushes, and with admirable dexterity peel off the rind from the tops of the birch boughs.

Ant's eggs, beetles, insects, are a favourite food, and these the hen teaches her young brood to look for and to find. In the pairing season the hens leave in succession the company of the rest, to lay eight, twelve, sixteen eggs in the thick underwood or fern. Whenever they quit the nest, the eggs are carefully covered over with dry leaves, twigs, or moss, so as to hide them entirely from view.

Early in spring, before the birch trees have begun to bud, and while yet at early morning there is a haze over the landscape, and the dawn is penetratingly cold, the black cock seeks a mate. The sky has not yet begun to grow grey, nor has that wonderful breath which passes through the air shortly before day break been felt, when already a chuckle is heard from the neighbouring wood, and soon after the fluttering of wings. And if you listen,—for as yet you can see nothing through the gloom,—you will hear the sound of the bird cleaving

the air, and approaching nearer and nearer, and then with a rustle alighting on the clearing. Or, not unlikely, you may previously have caught a quavering tone uttered from time to time, low and rather quackingly. This is the hen, who from some low tree announces her neighbourhood. On the broad snow-fields in the mountains it is the same. There, amid the stillness, you may hear the rustling and the chuckle long before the sun has touched the peaks overhead; and on the white surface you may see black forms dancing and fluttering in circles as if held within a magic ring. Before the hour of their arrival therefore, early though it be, you must be at your post. And hard is the labour if it be some mountain side you have chosen for your sport. For at this season there is much snow, and as the surface now will not bear, you have to wade along, sinking at every step to your knee or to your waist. However, be it where it may, the snow-field or a forest glade, you must have a rude hut made of branches to shelter you from observation. For the black cock is shy, wild, sharp-sighted, and with a fine sense of smell, and but for the madness which possesses him in the pairing-season, even the precaution of such a shelter would hardly avail much. Once there, you await the things which are to come.

But in order to be exact, the following details are given of an excursion to Bohemia for the purpose of

shooting black cock, as well as the experience then gained of this animal's peculiarities.

As we had far to go we left our inn betimes, and, the forester preceding us with a lantern, on we went behind each other through the coppice and the low grounds, where formerly there was a lake, but which lately had been drained. At this season the fields and moor-land were all under water, and for an hour and a half we went splashing through the inundated plain. At night and in the fog it was difficult not to miss the usual landmarks; and to avoid the trenches cut to carry off the floods. After groping about at the spot where the huts made of fir-boughs were erected, we saw them at last looming through the vapour, and each of us took his station in that assigned him. At this place, be it observed, the ground was not under water, though shaky and very marshy.

To be out at early morning and to listen to the gradual awakening of animal life around, and to hear how the very earth seems to be shaking off its deep slumber, and at last to see forms appearing in masses, and, gradually taking well-known shapes, emerge from the gloom;—this is one of the most interesting incidents among the very many which form the sum of a hunter's life.

For a short time after arriving in the hut all was still as death. First was heard the low, sad cry of the

goat-sucker — earliest of birds — as he flew through the darkness over the marsh; and presently, from the skirts of the wood, came the bleat of a roe that had been startled by a sound, or, not improbably, had caught the taint of our presence as a breath of air began to stir the leafless brambles on the dry spots around. The cry of a scared animal thus heard amid the profound stillness is very startling.* It makes the same impression as of a man talking in his sleep. Presently the faint chirping of the water-lark was audible; of the coot and other dwellers in the morass. But now came a cheery sound, foretelling that the sun was about to appear, and that he — that rejoicing singer — was going forth to meet and watch him come. Straight overhead rose a lark, pouring forth his gladdening song; and, accustomed as we are to hear the bird when we can look up and follow him on his heavenward flight, it did seem strange to listen to his warbling now while no light as yet was in the air. Then from a distant village came the lugubrious “toot, toot!” of the watchman’s horn, and a clock announced it was past three. Again the sharp bleat of a roe, but this time from a meadow in the direction of the hamlet.

* Cooper, in “The Last of the Mohicans,” gives an instance of this, when the party who have sought refuge in the cave hear suddenly, amidst the stillness of night, a cry none of them had ever heard before. It made them all pause; and those who were less accustomed to natural sounds and appearances it inspired with an undefinable fear.

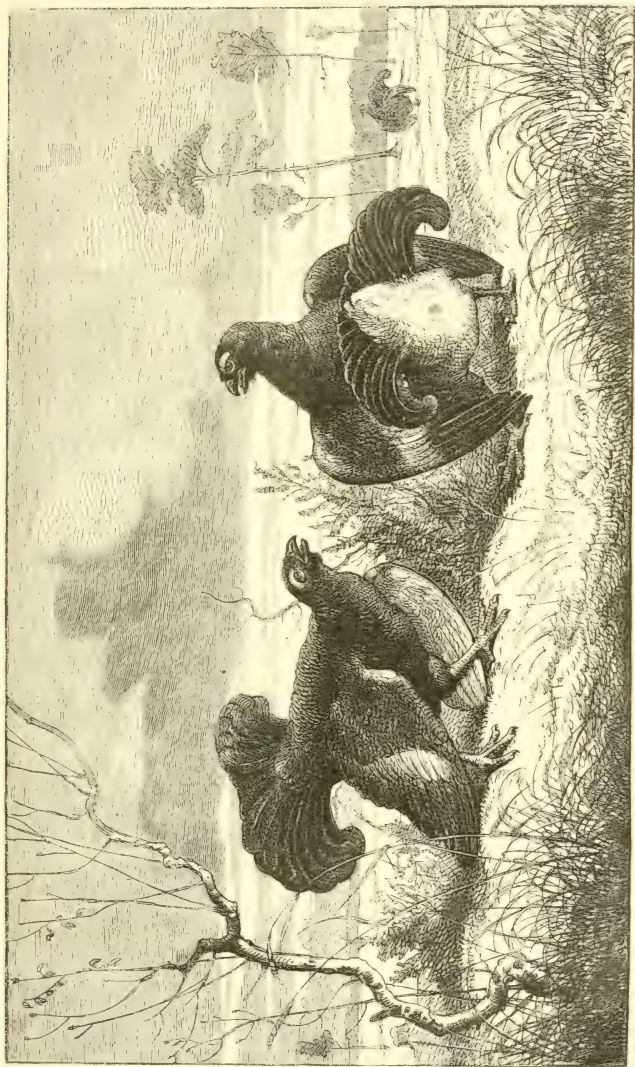
There is now on all sides an awakening; there is a hum in the water, and in the air, and in the woods, at first low and indistinct and tremulous, but gradually growing in volume, and becoming stable and definite. Now a snipe calls, and now a covey of partridges in fluttering flight whirr by. There is a sound of waters everywhere oozing, yet rather felt than heard, it is so low and stealthy — not separate, but mixing with, and part of, the murmur of Nature around.

The blackness is changing into a confused grey; — but hark! — there is a fluttering and a rush of wings, which tells most surely that a cock has come to the trysting place. And now another rushing of pinions and the same low “cluck! cluck!” as before. You look through the branches of your hut in the direction whence the sound proceeds and peer into the gloaming. But it is not yet possible to distinguish anything. However you hear the rush and the flutter of new comers: you hear, too, the half cooing half clucking tones they utter, rising and falling by turns, as they give expression to their passionate longing. Then follows a sudden and rapid beating of wings, and quick and sharp angry cluckings; for the joust has already begun, and they are fighting wrathfully.

How you long to see what is going on and to behold the manœuvres which you well know that fluttering betokens! And now they are clucking quite near, and

there is a violent beating of wings as they bound upward in their strife a few feet from the ground. If the haze would but disperse that you might get a shot ! When suddenly from one of the huts where your comrade is stationed comes the report of a gun, which tells you that yonder is less mist than here, or that the birds being nearer enabled him to fire. But now you too are able to see something, and about 150 yards off there is a black cock in the grass. To the right is another, and now from behind a hillock a third emerges. What can they be about ? With outstretched neck they move creepingly onward, with a sort of would-be gravity, and then stand still in the same position as before, looking as ridiculous as possible. But presently they begin dancing up in the air, and turning round like a turkey-cock, the tail-feathers erect and outspread. Up they jump again a foot or two, clucking and gobbling the while ; and then they will suddenly resume their old posture, and, poking out their neck to its fullest stretch, move mincingly forwards and with affected gait. But they approach each other now, and a fight ensues, and the weaker is driven away.

They are still pretty far, but a rifle bullet may hit one still. Your sights are fine—necessarily fine—and it is not day yet ; however you try, and the sharp crack of the explosion rings through the neighbouring



BLACK COCK.

wood. By Jove! there is the very fellow at which you aimed exactly where he was; he is looking up, it is true, somewhat surprised, but a moment more and he is at his old tricks again, creeping along as sillily as before. It reminds you of the "medicine man" in Catlin's Indians, who is playing just such antics as our black cock here, whom we have come a day's journey to see.* He calls in a somewhat coaxing tone, and the three notes of which his invitation consists are indicative of impatience and longing. From the birch coppice hard by, a hen now comes in answer to his summons. She is no prude: she knows too that she is, what by some is termed, "the weaker vessel," and that it is her duty to obey the will of her lord. From her his advances meet with no repulse, impetuous and insatiable as may be his love. He takes to himself a second and a third mate; and here each morning before the dawn he meets them, and celebrates his nuptials anew. The sweets of a honeymoon are compressed into one short span.

Another shot from your comrade's gun, but it does not disturb them. They go on dancing in a ring as

* The dances of the wild tribes of men are generally, or very frequently, at least, nothing more than an imitation of the movements of wild animals; as the bear-dance, the buffalo dance, and others. There is a figure in one of the dances represented in Catlin's book, exactly in the attitude of the black cock as above described, and not a whit less foolish-looking.

before. It is a laughable sight. And now turning on the opposite side of your hut, you look what is to be seen there, and behold ! another "medicine man" is having his dance. Does the distance, as viewed through your peep-hole deceive you, and is he not within range of your gun?—It was too far, for the bird runs a dozen yards as if a shot or two had touched him, and then stalks, and jumps, and pirouettes as before. And yonder are three, four, five, six more, but far off and beyond reach of mine or my comrade's gun. Now they come hopping along like boys jumping in sacks ; and they may at last be within range ; but now they stop and go off in another direction with their necks made as long as possible, poking close to the ground. One flies to the lower branches of a young birch, and chuckles inwardly at the recollection of his wooing. Presently he takes wing, and you watch him making for the forest ; but you tell yourself he will be there again to-morrow, and there is satisfaction in that certainty. One after the other flies away, for it is day now, and you are glad to emerge from your shelter and move your benumbed limbs ; and though there is a two hours' walk before getting home, and half of it wading through water, still there is a warm breakfast in perspective, and that is at all times cheering.

From the other hut comes my comrade ; and what has he shot ? There lie six fine cocks, as the result of

his morning's work. And how did he manage it? With the exception of one bird, all came close to where he was, and they made his task an easy one. To-morrow they might fall more in the other direction, and then that would equalise our sport.

It is always a chance whether the birds come in the immediate neighbourhood of your retreat, or close enough for a shot. But what does not happen one morning, may the next. And this watching and expectancy have their charm. Nor while you are waiting and hoping are you without amusement. The time does not seem long while observing their habits and drollery.

On the snow such dancing and trampling leave sufficient marks; and the spot where the birds have met, is like the ring of a circus after an equestrian performance.

As it will of course be understood, it is the cocks only which are shot. And of these but a certain number: care always being taken to leave some of the old ones behind, to lead the young generation in the following season to the accustomed trysting-place. And next year, in March, they are there on the very same spot as before.

Though this is a most faithfully exact account of a morning's sport at a certain locality in Bohemia, yet it

must be stated that nowhere else were the attendant circumstances the same, in one essential particular at least. Here alone did the birds remain unscared by a shot, absolutely taking no notice of it whatever. Generally they rise from the ground and fly to their usual haunts, to return again after a certain interval only, or maybe not to return at all that morning; for if some birds do appear afterwards, it is probable they are new-comers, who were not present when the first were frightened away.

It was the unusualness of the circumstances narrated above which induced me to travel to the spot, to witness with my own eyes what I had already often heard related by different friends.

THE GOLDEN EAGLE.

Aquila chrysaeta. Briss.

“NOT one fowler in fifty thousand has in all his days shot an eagle.” Thus writes Christopher North in his “Recreations;” and he is right in his assertion. Verily it seems impossible for such a deed to be of common occurrence. The truly royal bird, Jove’s eagle, is not to be slain like a mere fowl of the air: he whom we hardly ever see otherwise than thousands of feet above our earth, moving tranquilly in highest heaven. Above him no living thing can soar; between him and the sun there is nothing but that “beyond” which we know of only as “space” and “ether.” There he hangs suspended, resting on his mighty pinions, even as the gold of the sunlight drops down and rests on them. And from such confounding height, yonder in that region of unbroken solitude, he gazes on the world. His piercing vision reaches even hitherward: with a power of sight almost preternatural, he scans the movements of all that live below. Like a prophet or

seer, whose mental gaze penetrates the future, beholding what is hidden from common men, so does he seem to possess an eye with keenest potency of vision, far surpassing the range of all other earth-born creatures.

No wonder that, of old, men made him the companion of the god who reigned supreme on high : who sat enthroned on cloud, and at whose feet rolled the thunder. It is surprising that they did not proclaim himself to be a god : so olympian is his power, so searching his vision, so god-like the daring boldness of his sunward flight. What a blast is caused by the swinging of those pinions as he sweeps down and passes over you while striding along upon the mountain-top ! And how majestically he rises, higher and always higher, pausing only in his ascent when he has reached a height which makes him appear like a speck on the drifting cloud ! That region seems to be his home.

The Golden Eagle has frequently been seen soaring above the summit of the Wetterhorn and the Eigers : mountains whose heights are 11,412 feet and 12,240 feet respectively. Indeed, chamois hunters of the Berner Oberland affirm that the eagle flies even higher than the golden vulture, whose power of flight has always been considered as inferior only to that of the condor.

When we consider the weight which, in addition to his own body, the wings of the eagle are sometimes called upon to bear, what a notion is afforded us of his

might, of the giant strength with which he swings his pinions, and with them beats down the air! For when carrying away an animal, he does not merely fly with it from the valley in the neighbourhood of his eyrie, but he bears it often from distant plains, lying low down on the other side of those mountain ranges which separate people from each other. High up, even into the clouds, he mounts with his booty firmly clutched in his ruthless and destroying talons; and with the young chamois kid suspended beneath him, away he sails buoyantly, traversing half a kingdom, to his home. Besides his strength of wing, with what muscular power must those thighs be knit, thus to uphold such a weight for hours!

His limbs are those of an athlete, fitted for vigorous action. And what an eye the creature has! It seems to have caught the fire of the lightning as it rushed past him from the cloud: as if the subtler power were lurking there, ready to be launched forth, to search out, to scathe, and to destroy. Even in prison it is not quenched; and as you stare at him through the bars — though were he free he would certainly avoid you — he meets your eye with a steady gaze in no wise daunted, but as if expecting and ready for an attack. How much of untamed savage nature still kindles in that orb with the small tongue of flame playing in the centre!

The distance to which his vision penetrates, even while a fledgeling, is quite wonderful. A marvellous instinct seems to announce to the young bird the approach of the parent while as yet far off. A young eagle that had been obtained possession of was tethered to the rock on the summit of a mountain; and from a lurking-place built of loose stones, the jäger hoped to get a shot at the parents when they should discover where their young one was, and bring him food. Long before he perceived anything, the eaglet uttered cries of welcoming, having already recognised its parent wheeling like a circling point on high, or from the horizon making its way towards the spot. And he who accomplished the bold feat related further on, told me that, while waiting for the old birds at a short distance from the eyrie, the screaming and fluttering of the eaglet always warned him that the old birds were coming; though when he looked he was unable to perceive them, so far off were they still: yet invariably, after further search, he saw them wheeling aloft, and in due time they descended to the nest.

To an eagle a young child would be a very slight incumbrance in his flight; and accordingly we find that he is as ready to carry one away to feed his young, as he is to pounce upon a kid or a leveret. His swoop is not less precipitant than his eye is keen. It is sufficient for him to observe the babe unguarded for a moment, when

quick as thought he swoops down to it, and up again at once, bearing away for his inaccessible fastness with the helpless innocent stunned by the tumult of all those quivering feathers. That any one should live to tell of such attack is well nigh a miracle. Yet the wife of Zeller survived to acknowledge the mercy of her escape with thanks and gratitude. She "was playing on some rocky hills of the country, when one of their large eagles saw her, and darted down upon her head. A man with a gun, not far distant, watched the motions of the eagle but did not see the child. He fired, and killed the bird at the moment of his darting on the child's head, and great was his surprise on coming to the spot, to find the dead eagle by the side of the child. The deep wounds made by his talons in her head, showed what a narrow escape she had from the voracious bird, and from being wounded or killed by the gun." With a deep sense of the mercy that had watched over and protected her, she wholly devoted her life to the service of God.*

In building their eyries, eagles always choose spots that are inaccessible to their enemies. Some ledge, sheltered if possible by the overhanging rock, whither seemingly it is impossible for man to climb, and where also the young bird will be safe from the attacks of ferrets, weasels, martins, or other vermin; for should these discover and reach the nest while the parents were

* Stephen Grellett's Memoirs.

away, the eaglet's days would be numbered. A wall of rock *facing the south* best suits them. Such an aspect ensures the egg being kept warm during the mother's absence. As inaccessible spots with a fitting shelter and supporting ledge are not so easily to be found, it happens that a commodious and safe place of this sort will be resorted to by the eagle year after year for the purpose of breeding there. The eyrie in Rohrmoos has been thus tenanted during the brooding season since time immemorial. Although, as is recorded later, the old birds were both shot last year, other eagles have been already seen (I write this in March, 1861) wheeling above the place, evidently intending to breed there in the coming summer. An eligible situation for an eyrie is as little likely to escape their observation, as the small object on the earth when they are looking for food. If therefore eagles are in the neighbourhood, they will surely be found at such spot in the pairing season.* At first the parents bring their fledgling tender morsels, such as the entrails of animals; then the flesh will be torn apart and laid before him, prepared for his meal; but later, the entire dead body is flung into the eyrie, and the eaglet is left to tear and devour it as he may. When food has been

* In the history of the Isle of Wight, by the Rev. Richard Warner (1795), it is stated that an eagle bred among the crags of Culver Cliff: he was last seen there in 1780, when a man, who descended to the nest, found one young bird.

brought, the parent birds often absent themselves for a couple of days, leaving their offspring to fast, or maybe to feast on the provender last supplied. On such occasions the parent remains but six or eight seconds in the nest; and then away, to look out for more.

Nor must it be thought that because the eagle ranges over so extensive a space he must necessarily always find abundance of food. This is certainly not the case, and for a reason to be alluded to presently, or he would not leave his offspring so long unfed as very frequently happens. Nature, however, with her peculiar adaptiveness of arrangement, meets this difficulty by enabling the eagle, not only when grown up, but even while very young, to support the want of food for days together. Yet his appetite is good when he can find wherewithal to satisfy it; and five or six pounds of flesh he thinks nothing of at a meal. An eagle can go for a week, or even for a fortnight, as the horned owl can do, without eating.* One of those which Count Arco had taken from a nest some years before, was kept at Berchtesgaden, where he still is. The jäger who had charge of him, once stayed out on the mountain the whole week, and his comrades, not knowing this, omitted feeding the bird. On the eighth day, when the man returned, he

* In a state of captivity, it is said, he can fast four weeks without injury.

was fed, and devoured at once about seven pounds of meat.

I alluded above to certain reasons on account of which the eagle would not always be able to obtain prey, wide as his domain might be. A falcon pounces down on its booty; and then tears and devours it on the ground. He can do this without fear of meeting resistance, as it is smaller birds only that he preys upon. He masters them at once; he has not to guard against getting himself into danger while securing them. He is small of body, and can pass in and out of and among adjacent objects, where a bird with a larger expanse of wing would not dare to enter.

An eagle will only carry off such object as he can seize *in sweeping by*. He will not descend to any spot of ground, unless he can leave it again describing the same bold curve with which he came. He will not risk being hemmed in within narrow limits. An open field is indispensable to him for his tactics. The object must be freely exposed, or he will hardly venture to attempt making it his own. As a swallow rushes downward in a curve to catch the insects hovering over the pond and upwards again on high, in his flight describing an ellipse, so does the eagle, *and thus only*, sweep down to seize a lamb or other animal. It must be swept off the ground in full flight:—it must be caught up at once without any hindrance: there must

be “ ample room and verge enough ” for him *to continue* his sweeping flight, or the eagle will prefer not to break his fast ; and will refrain from attempting that by which he may come to grief. Protection is thus afforded many a creature, that would otherwise never be safe from so formidable an enemy. A small bush is sufficient guard against his attack ; for he always takes heed not to approach places where he may get his talons entangled and be held fast, or not have sufficient space for the movement of his wings. But for this fear of getting into difficulty, he would feast oftener and fast more rarely than he does.

It might seem that, with his keenness of vision and speedy locomotion, he need not long be in want of a meal ; that in ranging over an entire principality or a dukedom he surely would be able to find some game or other. And he doubtless does see enough that would suit his purpose well ; but nothing exactly in the situation that makes it advisable for him to attempt to bear it off. There are lambs below in the meadow, but they have instinctively become aware of their impending danger, and have crowded together in one dense mass, with the ewes outside ; or they have all taken shelter beside a sloping bank, or beneath a tree, or alongside of a hedge. None of these positions suit the eagle. In the mountains the chamois do the same, or they stand sideways pressing close against the rock : here

the eagle cannot get near them, for fear of injuring his wings. Sometimes, too, they will take shelter around or under a large fragment of stone, determined to defend themselves to the last; but into a warfare of this sort the eagle has no intention of entering. Among those stones and clefts may lurk a danger he cannot see and had not calculated on; so he leaves them, however unwillingly, to look elsewhere for a kid in a situation so exposed that, without stop or stay, he may clutch it as he skims by within a foot of the ground. And so he often knows the pangs of hunger. It is only when driven to extremity that an eagle will descend upon the earth and battle with his prey. It is contrary to his instinct to do so. The air seems to be his peculiar element, and earth an uncongenial spot, and, moreover, full of pitfalls: it is, too, rendered doubly dangerous by being the abode of man. Of him the eagle has, in common with all wild animals, an insurmountable dread.* Here also he would have to

* Stories are told of persons being attacked by eagles when plundering their nest. Count Arco is inclined very much to doubt their truth. He asserts that the eagle is as much afraid of man as other wild creatures. And, indeed, his own experience seems to prove the correctness of his opinion. Once when in the neighbourhood of an eyrie, the parent bird swooped down towards him, but did not come nearer than eighty or ninety yards, though nothing was done to hinder it from approaching. On another occasion, he was within a dozen feet of the nest where the eaglet was; the old bird returned while he was thus approaching the eyrie, and came suddenly upon him; but instead of at-

encounter and repel attacks to which he is unaccustomed. We all know that even the delicately-formed roe can inflict such blows upon the fox, as to make him pretty quickly relinquish his designs against her kid. Once on the ground, much of the eagle's formidability is gone; and a roe, with her back against a rock, or even if quite free, might impart with her fore-feet such a well-directed stroke on her winged assailant, as to make him hesitate; and a second, given with her wonted quickness, adding to his confusion, cause him to retreat more punished than, at first sight, might appear possible. A roe-buck, waiting for the favourable moment, would inflict with his sharp horns a deadly wound: a chamois also. If there be an opportunity of dealing *one* blow, or giving *one* home-thrust, the eagle's victory is already doubtful; and, knowing this, an act of depredation, when he does commit it, must be quick and sure.

A case in point occurred at Berchtesgaden. An eagle was wheeling in the air, waiting for an opportunity to carry off a chamois kid; but the doe, aware of the danger that threatened her offspring, stood over it, completely covering it with her body. Though she trembled violently in every limb, she still kept her head turned upwards in the direction of the robber,

tacking him, although so near her young, she suddenly swerved and flew off, affrighted by his presence.

watching all his movements. He swept by several times, as if to examine what was to be done; and once came so near that the chamois was able to deal him a severe blow as he passed. He made no further attempt to approach, and, after sailing round and round on high a few times, disappeared.

That the royal bird, despite the advantage of evading an attack which his wings apparently afford, does not always escape, a circumstance related in the *Memoirs of Stephen Grellett* sufficiently proves. In journeying along the road that led past the Putrid Sea he saw a dead wolf, with the eagle which had attacked it lying by its side. The talons of the bird were nearly buried in its back: in the struggle both had died.

As the mountains around the Königs See abound in chamois, the eagle very naturally resorts there; and opportunity is frequently afforded of witnessing his tactics, modified by circumstances. The following account gives an instance of most cunning stratagem; but it also shows how impotent for attack the eagle is, when his victim is not entirely exposed. A good-sized chamois buck had got upon a ledge of rock, and was gazing downward and about him as these animals like to do. An eagle perceived him, but as the bird could not approach close to the rock on account of his breadth of wing, he resolved to obtain the prize he had marked

as his own in other manner. So he sailed by the chamois on his narrow path as near as he dared come ; then again and again ; and as the animal retreated in order to quit his perilous position, the eagle, wheeling round in a smaller circle, met him instantly to hem in and cut off his retreat. By thus rushing past within a few feet of him, and filling him with terror, he hoped to bewilder the chamois, and cause him to fall over the precipice, in which case he would have but to descend and carry off his booty. And, in fact, the chamois, from trepidation probably, in turning a corner slipped with one hind-foot over the ledge. He lost his balance and fell headlong over the rocks, as the eagle intended that he should. But after lodging for a short time on an intervening slope, the carcase rolled off, and came toppling down into the lake. The whole proceeding had been watched by two persons from a boat ; they now rowed across to get the chamois, while the eagle, disappointed of his victim, wheeled above them, watching all they did.

Just as a child likes to enjoy the consciousness of having possession of a cake, and revels for a while in the pleasurable feeling before taking the first bite, feeling sure that delay will not weaken his tenure, so will an eagle very often toy with his victim, and though within his grasp, defer the fatal grip. At such times his appetite is probably not very keen ; or he is in a

merry humour and likes the fun of seeing the terror he causes, as he races in his mirth round and round the animal almost paralysed with fear. Or perhaps there is somewhat of a Caligula in his nature, and he considers *that* the only true enjoyment which is purchased by the acute suffering of others. Be it as it may, he will thus dally with a creature's anguish, and only after having twenty times swooped down as if to seize it in his talons, do so in reality.

On the plain around Munich, and not far from the city, a spectacle of this sort was observed some winters ago. A hare, as he skipped over the broad snow-field, was perceived by an eagle wheeling aloft. Down he swooped just in front of puss, and circling round, was in a second again before him. Turn which way his victim might, he found himself always thus hemmed in. Now the eagle would threaten him from one side, now from another: and then would hover over or pounce down upon him as if about to seize him by the neck. But the eagle only does this when there is no opportunity for the animal to evade him; when at any moment that he chooses he may grasp and carry him off.

The capacity of the eagle for enduring hunger clearly points to an occasionally recurring state of things which is thus provided for. And they do in fact often experience what it is to want food. Gray, therefore, whether

he knew it by intuition or from practical observation, is correct in his expression,

“The famished eagle screams, and passes by.”

Great as are the distances which these birds sometimes fly, it becomes comprehensible when we know that an eagle, as he sweeps freely through the air, traverses a space of sixty feet in a second of time. To be able thus rapidly to move along is undoubtedly an attribute of power; but there is something far more imposing, far more majestic in that calm, onward motion when, with wings outspread and quite still, the mighty bird floats buoyantly in the atmosphere, upheld and borne along by the mere act of volition. The length of time he can thus remain suspended without a single beat of his broad, shadowy pinions is, to me, still an inexplicable fact. He will sail forward in a perfectly horizontal direction for a distance of more than a mile, without the slightest quiver of a feather giving sign that the wings are moved.

Not less extraordinary is the power the bird possesses of arresting himself instantaneously at a certain spot in dropping through the air with folded wings from a height of three or four thousand feet. When circling so high up that he shows but as a dot, he will suddenly close both wings, and, falling like an aerolite, pass through the intervening space in a few seconds of time. With

a burst his broad pinions are again unfolded; his downward progress is arrested, and he sweeps away horizontally, smoothly, and without effort. He has been seen to do this when carrying a sheep of twenty-six pounds weight in his talons; and from so giddy a height that both the eagle and his booty were not larger than a sparrow. It was directly over a wall of rock in which the eyrie was built; and while the speck in the clouds was being examined, and doubts entertained as to the possibility of its being the eagle, down he came headlong, every instant increasing in size, when, in passing the precipice, out flew his mighty wings; the sheep was flung into the nest, and on the magnificent creature moved, calmly and unflurried as a bark sails gently down the stream of a river.

Christopher North "in his Aviary" alludes to a dialogue in Sir Humphry Davy's "*Salmonia*" between Poietes and Halieus about an eagle. "Look at the bird, she dashes into the water, *falling like a rock*, and raising a column of spray: *she has fallen from a great height!* And now she rises again into the air;—what an extraordinary sight!" On this Christopher observes, "An eagle does not, when descending on her prey, fall like a rock. There is nothing like the *vis inertie* in her precipitation." But as this "falling like a rock from a great height" tallies exactly with what others have witnessed as well as Poietes, there is no reason for

asserting that Sir Humphry “does not shine as an ornithologist.” Had Poietes not absolutely *beheld* what he describes he could not have told of it; for it is one of those things which it would never enter our heads to invent. And he was right; it *is* an extraordinary sight, though wayward Christopher chooses to talk sneeringly of the man’s astonished utterance. Whether, however, it was to obtain his prey that the eagle thus fell, I am not so sure. Indeed I rather doubt it; for I agree with Christopher in his assertion that the swoop of the bird upon his booty is quite a different movement to this.

No two men can well be more unlike in style than Sir Humphry Davy and Christopher North. In their descriptions there is the same difference as would be in a sunlit hill-side painted by truthful and poetic Constable, or as we should behold it reflected back from the poetic but fanciful mind of Turner.

Delightful as it is to allow ourselves for a while to be borne away by Christopher North’s description and hyperbole, he is not absolutely infallible “as an ornithologist” either. He speaks in his “Second Canticle” of “the imps,” “the eaglets,” “the young ones,” “the bursting of the shells,” as though it were the commoner occurrence for there to be *several* eaglets in a nest. This is not the case. There is rarely more than one. Two or three eggs are laid, but two, at most, are hatched.

Such circumstance therefore would be not the rule, but the exception. Now and then two may be found, but never three. This accounts for their rarity, alluded to also in the "Recreations." "Poietes ought to have known that there are not *many* of these animals in any country. Eagles are proud — apt to hold their heads very high — and to make themselves scarce. A great many eagles all flying about together would look most absurd. They are aware of that, and fly in 'ones and twos' — a couple perhaps to a county."

We have seen that even when the parents have to feed but one fledgeling he must fast sometimes twenty-four hours. Were there a nestful there would be still more difficulty in feeding them, and they might starve; as the ration that was sufficient for one would not afford nourishment when divided among three. Here again, as in every other instance when thoroughly examined and rightly understood, we see the wisdom of God's ordinances, and what perfection of arrangement exists throughout the whole economy of nature.

The inaccessible steeps on which eagles build their eyrie, the height to which they soar, often rising quite out of sight; their keen vision, their caution, and especially their avoidance of all neighbourhood with the lowlands where men have their dwelling: all these causes together make it of rare occurrence to get a shot at an eagle. Yet there are some favoured mortals to whom

such good fortune has been accorded even more than once; Joseph Solacher, of Baierisch Zell*, has shot three. The last he brought down by the merest chance. He was returning home after a day's stalking on the mountain, when he heard the rush of wings just above him. Snatching his rifle from his back, he looked up, and saw an eagle poised in the air directly over his head. He aimed steadily, though without expecting to hit him, and fired; when, to his astonishment, down dropped the eagle quite dead at his feet. Count Arco has shot ten: four in the neighbourhood of their eyrie, and the others by waiting for them at a spot where a kid or chamois was exposed: for though eagles will not eat carrion, they take the flesh of an animal recently killed.

I give here a detailed account of this gentleman's successful attempt to carry off an eaglet from the eyrie; and I make use of his own words, just as he entered them in his diary on the occasion.

June 13, 1860.— Arrived at Rohrmoos in Allgäu, an estate belonging to Prince Frederick Waldburg-Wolfegg-Waldsee, thirty miles from the Lake of Constance, at seven o'clock in the morning. Immediately held a consultation with the land-steward, who had been born and bred there, and knew the country well, as to the best method of undertaking the expedition to the eyrie in

* For an account of this family see "Chamois Hunting in the Mountains of Bavaria," chapter vii.

the so called "*rothen Wand*," in order to get possession of the eaglet. I put an end to the debate by at once starting with him for the spot, in order to reconnoitre, and, having seen all with my own eyes, to make my arrangements. The whole "*Wand*," or wall of rock, may be about four or five hundred feet in height, and above the recess where the eyrie was built, projects a distance of at least twenty-five feet. The face of this rock was about six hundred paces broad. Nearly half way up this precipice there is a path * which the chamois take in passing to and fro, two or three feet broad, where a very good climber and expert mountaineer might get along pretty easily. To approach nearer than this to the eyrie is beyond all human possibility. Below it, and growing on this very path, was a sole small fir, and above grew a bushy red yew, which I resolved to make use of as a hiding-place whence to shoot the old birds, before attempting to reach the eyrie from the little fir below. The steward, Weber by name, and myself now fetched with much difficulty a quantity of fir and pine branches and built up a sort of bower, from which place of concealment I hoped to get a shot at the parent birds. On the face of the same rock is a second eyrie, where, since

* Though the word "path" is here used, it must not be understood according to our usual acceptance. Slight projections of a few inches in breadth form a "path" for chamois, broken and rugged, and seemingly impassable.—C. B.

many years, the eagles generally were to be found, and here it would have been an easy matter to destroy the parents and get possession of their young. In their present position, however, no attempt had ever been made to come at them, it having always been looked upon as an utter impossibility, and I cannot but acknowledge that to test the possibility of such an undertaking is no easy task.

June 14.—Watched in my place of concealment from 4 A.M. till 6 P.M. A pouring rain added to the delights of these fourteen hours. At three o'clock in the afternoon the eagless came, and before she could quite fly into the eyrie I shot her. She dropped at once; but the way in which she fell convinced me more and more that these animals require a good charge in order to kill them. Moreover, on remembering how small the bird had seemed to me, as she was just about to wheel towards the nest, I found I had been deceived as to the distance, and had fired too far for the bird to receive the charge with full effect, namely sixty yards. I could not look below, and so I remained where I was three full hours, hoping that the male eagle might come too; for I know by experience that, although the eagle keeps to no particular time for feeding his young, they prefer returning to the eyrie at morning and at noon rather than late in the evening. At six o'clock I climbed down, the rain falling in torrents all the while, in order to look

for the eagless. It was impossible to find her, on account of the quantity of loose stones, holes, and stunted bushes, and so I soon gave up the search. A thousand thoughts torturing to the heart of a sportsman, filled my brain for half the night; and what most occupied me was the fear that the eagless, in falling whither I could no longer follow with my eye, had managed to flutter away, and I should not be able to find her on the morrow. It was a long shot. Shot, after all, is very different from a rifle bullet. In short, I fell asleep in no very rosy humour.

June 15th. — Thorough rainy weather: pouring down the whole night and nearly the whole day. At eight o'clock I went up with Weber and his men to the spot, which is a good hour's walk from Rohrmoos, to look for the eagless, and, as luck would have it, I found her this time within a quarter of an hour in a cleft in the rock, exactly where I had vainly looked the day before; a spot which in my search I had certainly passed twenty times without stumbling on the bird. Whether it was dead when it fell, or crept hither while merely wounded, it is impossible to say: certain it is however, that without the good fortune of literally treading upon it in our search, we might have looked for days without discovering it. Wet through, but overjoyed, I returned to Rohrmoos. Meanwhile such a dense fog came on in addition to the rain, that it was impossible to undertake anything more that day. The

eagle was dried, the pleasure of pulling out the beautiful delicate down was enjoyed, and the bird was then packed up in a case to be sent off to Munich on the morrow, in order to be stuffed. In the evening it grew clearer, and I took a walk through the valley, and saw the male bird wheeling aloft in the air till it was almost dark. I could hardly await the morrow.

June 16th.—At four in the morning beautiful weather. As I was about to start for my post, the eagle was wheeling round and round: he did not go however in the neighbourhood of the eyrie. Two hours later he was no longer to be seen. I was off at once, but by the time I had got up to my look-out he appeared again, saw me go to my ambush, and darted down with the speed of lightning towards me. But as often as he did so, he invariably made a movement to the right about, at the respectful distance of eighty yards from the spot where I stood; till at last after a couple of hours, he went quite away; which time he spent in wheeling high and always higher in the air. Although my hopes for that day were but small, I still remained there till evening; but in vain, for no eagle appeared. On coming home, Weber told me that he and the son of the forester of Fischen had three times last year missed the very same eagle on the upper eyrie, and in consequence of this he had grown very shy and careful. Our meeting of to-day,

thought I, in addition to the circumstance of missing his mate, will not tend to make him less mistrustful.

June 17th. — This being Sunday I went with the steward to Tiefenbach to church, two hours' walk distant, so it was noon before I could think anything about my eagle. On our way back we saw him wheeling aloft. In spite of the rain I climbed up to my post, getting there by one o'clock, and remained till evening. The eagle did not make his appearance till late, when I was half way on my road home, and then without alighting on the eyrie.

June 18th. — Rain and fog to such a degree that it was impossible to see anything. Towards noon it grew a little better, so at once I went to my post. The eagle came at five o'clock, wheeled round a few times, and then sailed away without returning; so that I began to fear untiring patience, great cunning, and much good luck besides would be necessary, in order to obtain him, if indeed it were possible to do so at all.

June 19th. — The weather being magnificent I went away to my post at half-past one in the morning. There was such a hoar frost that I was almost frozen, and by the time it was six o'clock I did not think I could bear it any longer; when, towards eight, the arrival of the eagle gave me a little warmth. He wheeled round for a while, then perched on the very summit of the precipice, about 200 yards off, on a dead

tree, and never once ceased gazing at me in my concealment for two full hours. I watched him the whole time with my telescope through the small porthole in my screen, and saw distinctly that he was occupied uninterruptedly and exclusively in discovering if I was inside or not. His countless various movements with the head, neck, and eyes were in a high degree interesting. Bitterly uncomfortable as it was to do so, I still resolved not to stir, as his cunning would assuredly have discovered the least movement on my part. Those were two painful hours! At last he spread his large pinions, and with a single rush shot away from the rock and disappeared over the ridge. I thought, should he not have observed me, he will certainly think all is right, and will go to fetch provender for his young: if, on the contrary, he does not return, then he assuredly has seen me in spite of my concealment. An hour had scarcely passed when I suddenly heard a rushing noise, and at the same moment he had already flown past the eyrie. In doing so, he had, with a dexterity equal to his cunning, flung sideways to his offspring a roe-kid which he held in his talons, and then, instantaneously folding his long wings close to his body, dropped like a stone through the air, a distance of 200 feet; when suddenly, as with a start, spreading out his pinions, began to wheel about quietly as before. All this was the work of a moment, so that

it never once entered my head to fire. The extreme cunning of the creature in letting himself fall in this way completely stupefied me. "If he does so always," then I thought, "I do not know how I am to hit him." Just after five o'clock I heard again the same rushing sound, and again, before I could even think of firing, he had dropped down and vanished in the deep; flinging food to his young in the nest, and securing himself against the chance of danger just in the same way as he had done in the forenoon. This time, however, I remarked that, while with his talons he flung the food in the eyrie, he simultaneously flapped twice very quickly with his wings, there being so little room for him while thus close to the rock, and then, and then only, dropped downwards through the air. So I determined should he do the same to-morrow, to take my chance, and fire just at this instant of time: short enough, it is true; but to hit him at any other moment seemed to me an impossibility. That he would fly into his eyrie was not at all likely, for he knew very well why he proceeded thus and not otherwise. This morning I rose at one and returned home at seven in the evening; sixteen whole hours, fourteen of which I spent sitting on the same spot; a task for which a certain amount of patience is indispensable.

June 20th.—Went again at half-past one to my place

of ambush, which, as I had to climb up there in the dark, was not exactly very agreeable. At four o'clock the eagle came, wheeled around for a time, and then alighted exactly as he did yesterday, and peered down towards me for full an hour. Then he flew away with great rapidity; and I thought, "Now he fancies himself safe, he is gone to fetch food, and will most certainly soon be back." However, five long hours passed without my seeing anything. I was so overpowered by sleep, it was hardly possible to resist it; for to sit thus hour after hour in expectation, and always ready to fire, is very tiring; but excitement conquered my drowsiness, and at last, at half-past eight, I heard the much wished-for rush of the eagle's wings. I aimed quickly, without seeing him as yet, at the spot I had noted; pulled the trigger at the moment when, rushing past the eyrie, as yesterday, flinging in the food, he made two quick strokes with his pinions, in order with folded wings to drop below, and saw him happily go tumbling downwards. During the many hours which since eight days I had passed up here, I had occupied myself, in the quiet moments, with cutting my name in the trunk of the yew tree, as well as the date: a memento for those who perhaps at some future time may again lie in ambush here for an eagle. I now descended, fetched the eagle, and hastened with my prize to Rohrmoos, to make arrangements for getting

at the young bird. Hardly allowing myself time to eat, with all expedition I got together ten wood-cutters, and without delay climbed up to the spot once more with Weber and the young forester Vogler, who, as being the lightest and boldest of the party, had volunteered to be bound to a rope let down from above, and thus, in the usual fashion, to be drawn up to the nest from where we stood. I told Weber, beforehand, that owing to the projection of the overhanging rock, it would be impossible for Vogler, while hanging by the rope, to pull himself in horizontally towards the eyrie, even though furnished, as he intended to be, with a sort of boat-hook fifteen feet long. In the first place, the hooked pole was at least ten feet too short, the overhanging rock projecting twenty-five feet; and, secondly, on account of such considerable projection, it would only be possible to get *above* or *below* the eyrie, but not to get *into* it, even supposing that he had really a pole twenty-five feet long, and were able to direct his motions while thus dangling in the air. But he did not believe me. Hardly, however, was Vogler hoisted thirty feet upwards, when the honest fellow himself saw that he was much too far away from the face of the rock. Moreover, as the rope turned round, he grew quite giddy and bewildered, and cried out, "Lant mi ra! Lant mi ra! I verlier da Verstand! I wer ganz törmli!"—"Let me down! Let me down!

I shall lose my senses ! I'm getting quite confused !") Weber and I were now unanimously of opinion, after we had taken an approximate measurement of the height with the rope, that it would only be possible to get at the eyrie by means of a ladder at least one hundred feet long. For to-day, therefore, we were obliged to return home, after eight hours of fruitless labour. During the night I had two old ladders repaired, which were wretchedly weak and crazy ; and one new one made.

June 21.— This morning had the ladders and necessary tools carried up by fourteen wood-cutters. Weber, the steward, went up to the very top of the precipice with ten men, and showed them how to direct the movement of the ropes ; he then came down to the chamois-path under the eyrie, with the two young hunters Baader and Vogler. From this spot we were cut off from all direct communication with the men above, owing to the twenty-five feet of overhanging rock. As they could neither see nor hear us, communication was kept up with them by means of a living telegraph placed at some distance sideways, who at least could hear well and speak distinctly ; for a misunderstood direction regarding the ladders was a matter of life or death. A great difficulty was to fasten the three ladders together, and then raise them with the rope. The six men who stood near me were all doubtful of the possibility of its accomplishment.

However, after many an hour's hard work, it was done at last.

There then stood the three ladders, 110 feet in length, firmly bound together and held by the rope from above, as straight as a plummet line, with the foot resting on the earth. I now had them drawn up till the lowest part hung even with the spot where the young fir was growing, and by means of a boat hook, pulled them in and planted them there. The foot of the ladder was now, it is true, in the right place; but the upper part, owing to the overhanging formation of the wall of rock, bulged out with its own weight. By means of a hook and a small rope, I managed at last, after vain efforts, repeated for more than an hour, to make the ladder incline inwards*, towards the eyrie. Weber had now to go up, and, on the word of command being given, slacken the rope twenty feet or so, and let the ladder fall against the eyrie. In this manœuvre it was much to be feared that either the ladders would break, or that we should have to attempt it a hundred times in vain, till at last, by good chance, it should fall as we wanted. After endless endeavours it fell really against the nest without breaking. But now I saw that the ladder reached only the bottom of the eyrie, and was therefore

* Forming thus a concave line, or "bellying," as boys say of the string of their kite, when, instead of being pulled pretty straight, it hangs, or "makes a belly," downwards.—C. B.

some feet too short. It nowhere rested against the rock, and being of very light construction, its own weight, long as it was, caused it to make a concave line which was unpleasant to look at. The lower ladder, the craziest of the three, thirty-eight feet long, stood at an angle of sixty degrees: the second which had been entirely constructed during the night thirty-six feet long and destined by me to occupy the central place as having to support the greatest weight, stood perfectly perpendicular; the third, thirty-four feet in length, formed an angle like the first, only in the contrary direction, namely backwards. At the top it was full two feet from the eyrie, and leant against the lower part of it and on the branches and interwoven boughs of which it was built.

The work, after all, when completed, did not look very inviting; however, I asked the foresters and the four wood-cutters if, now the ladder was raised, they had the courage to go up. But immediately each one answered it was quite impossible; and that whoever ventured upon the topmost ladder, be he never so light, must inevitably fall backwards. In short, they all asserted it was an utter impossibility, as the ladder, not being fastened at top, would slip on one side or the other; inasmuch as the rope from the overhanging rock was quite useless. If they were to get all the surrounding territory for their pains, they said, nay, not for a million,

would one of them venture to climb up that ladder. When I saw that of these six young fellows not one had the courage, nor the necessary confidence in his own dexterity to make the attempt, I replied, "Well, if that is the case, I must needs go up myself, for I will not let the eaglet starve after having shot the parent birds! Down he must come, happen what may!" The six young men looked at each other abashed: their faces showed, however, that they thought to themselves, "He'll take good care not to go up either!" I now ordered what was to be done in case of an accident: above all, I, with all emphasis, required of them that as long as I was on the ladder no one was to speak a word; and that even should they see me, with ladder or without it, precipitated and dangling at the end of the rope, they were on no account to call to those above, but on the contrary, to await quietly my instructions. It was only at the express desire of the men that I consented to fasten a second rope to my body which was let down for this purpose from above, in case of the ladder's breaking, or of my falling down without it. It would, however, have availed but little, as it could not be drawn "taut," on account of the overhanging rock above, without pulling me off the ladder. Altogether, this rope was a great hindrance to me in mounting, and anything but a security; as, in case of a fall, it would doubtless have broken with the jerk, being half worn out

already. It was much more likely that the other strong rope would have done its duty, should it have to bear the weight of the ladder falling backwards. At this moment we heard a fearful rushing noise in the air. All looked up. I and the man next me were as if thunderstruck; for a huge piece of rock came falling down between him and me, with such swiftness that for a moment I was breathless, and the blood in my body seemed as if it were boiling. It probably had been loosened by the blows of the men's axes while working above. The man and I were but a yard apart, and it is really wonderful that it grazed neither of us. The fright of the men was great; to me, however, it seemed a sign that my hour was not yet come. After this circumstance I began to mount the ladders.

The first was so slender that it rocked with my weight very considerably, and I was glad when it was passed. When I now came to the perpendicular one, and saw the position of that at top, I cannot deny that as I mounted, I commended my soul to my Maker; but I was calm, and as full of confidence in the strength of my arms, and in my bodily activity, as though there was not the least danger present. The perpendicular ladder was now ascended. Although I had not the least giddiness whatever, I could not but see, on looking upwards, and then down below, that to mount the third ladder was a feat for a rope-dancer, rather than for any-

one else; and, thinking of my wife and thirteen children, I turned it over in my mind whether it would not be better to go back. Meanwhile it occurred to me that as long as the upper part of the ladder did not project more outwards, it would, by reason of its own perpendicular weight, bear the weight of my body hanging backwards without toppling over. Trusting therefore to this, I now began to mount, my body hanging down and away from the ladder, which as the men afterwards told me, was a really fearful sight. I now was at that part of the ladder where it leaned against the straggling branches of the eyrie, and had ten or twelve rounds still above me. I discovered that the eyrie instead of being two feet high, as we had supposed when viewing it from below, was composed of branches which had been accumulated by the eagles for years, and was nearly eight feet in height. The ladder was, therefore, about eight feet too short, in order to enable a person to step off it into the nest. What was to be done? To turn back was not at all to my taste, and the hope to be able at least to look into the eyrie, carried the day.

With all heed I mounted higher; putting my hands through the ladder and holding on by the branches of the eyrie, and with my feet pressing the ladder as closely as possible against it. I had now the last round of the ladder in my hand, but there was still five feet to the

nest; so that I was obliged to trust all my weight to the branches that composed it. Boring my hands and arms as far as I could into the immense fabric of boughs and branches, I carefully tested them all till I found one that I could neither snap in two nor drag out: grasping this firmly, I thus got on the topmost round of the ladder—one hundred and ten feet high; but even now I could only lean my chin firmly against a stick on the outermost edge of the nest, while with both arms I held fast on its surface. Just before me lay a half putrid dead animal, alive with a million of worms, and there was a stench enough to knock one down from the ladder. However, in my unsafe position there was little time for giving due attention to all this abomination. When I had gained a firm hold, I allowed myself to stretch my back and knees, somewhat; by doing so I gained half a foot, which just enabled me to peep into the nest, where to my despair, I made the discovery that the young bird was sitting in the very hindermost corner, four feet away from me. On gaining sight of him, I held doubly tight with my left hand, and saluted the young scion of a royal race with due respect, taking off my cap to him, and waving it with a shout to the men below. I now cast a look at the household arrangements of the eyrie, and discovered at least half a dozen roe and chamois kids, several hares, black cock, a weasel, &c., all half devoured, half decomposed, besides a mass

of bones and skeletons spread out on the nest, which was alive with all sorts of vermin. It was a veritable carrion pit, horrid and disgusting. The question, however, was to get possession of this future despoiler. I dared not clamber on to the nest, even could I have done so; for I then should have been unable to reach the topmost round of the ladder in getting down again; consequently I should have been obliged to remain in the eyrie a few days and nights, perhaps, till aid might be brought me; which, after all, was a very questionable matter. So I pulled a long thin stick out of the nest, and with it poked the young bird. As I expected, he found this poking not at all to his taste, and furiously seized the stick with his talons. Drawing the stick quickly towards me, with my right hand I laid hold of him by the back. But the question was how to bind the animal, defending himself as he was with all his might with his claws? I had brought a thong with me for the purpose, which I carried in my mouth in coming up the ladder, well foreseeing that my position would not allow me to get it first out of my pocket. But he grasped the stick so firmly that I could not make him loose his hold. My left arm was beginning to grow fatigued. "If," thought I, "I could only manage to get the assistance of the thumb and forefinger of my left hand!" But to get the forefinger at liberty, which with the other fingers alone supported me,—to get it

out from beneath a strong branch, it would be necessary to swing myself upwards towards the nest, and at the same moment relinquishing my hold, change fingers, and hold on by the three others only. In doing this my body would necessarily be for a moment without any support whatever, hanging backwards over the abyss. I considered whether I ought to venture it; and it was only with the feeling of being able to maintain my equilibrium, without causing the ladder to rock in the least;—it was only with the consciousness of being as calm, cool, and possessing the same presence of mind as if I were sitting at my writing table, that I undertook the movement. This, insignificant as it may appear to many a reader, was, after all, the most perilous moment of the whole undertaking. Thank Heaven! I had calculated rightly, and it succeeded;—my three fingers held me firm.*

* As this movement was, at first, not quite intelligible to me from the description, I asked Count Arco to explain it to me more clearly. "Look," said he, "you will understand it in a moment." And shutting and locking the folding-door of the room, he grasped the handle with all the fingers of his left hand, three being on one side and the forefinger on the other, with the thumb below. Then putting his feet close to the bottom of the door, he let his body fall back at arm's length. He was thus hanging on to the handle of the door by his left hand, which had to support the whole weight of his body as it hung backwards. In this position he could not loosen a finger, each one having its duty to perform without coming down on his back. "Just as I am standing now," he continued, "I was standing on the topmost round of the ladder, with this difference, that the space that is now between me and

With my right hand I then turned the eaglet quickly on his back, which was not so easy, as he held on to the stick with a convulsive grasp. Then letting go, I made a grasp at his talons which were now turned upwards, but caught only one of them, while with the other he tried to seize my hand, but happily clutched the stick instead : at the same instant, however, I got hold of the second talon. I now with the right hand was able to lay both talons in the two liberated fingers of my left hand : with the right I then took the thong and quietly bound them together in spite of his loud cries, his fluttering and resolute resistance ; fastened the other end of the thong to the upper button of my coat, and then repeated the swinging movement so as to have my entire left hand for holding on by. Both arm and hand were now getting cramped, for I had been three quarters of an hour on the ladder, and two-thirds of this time hanging to the nest. Victory having been achieved, I therefore began to think of effecting an orderly retreat. So, with my right hand, I let my prisoner hang suspended behind me, in order that he might not incommode me while descending, and

the door was filled up by the sticks and brambles of the eyrie, and that I could just get my chin on the top of it. Well ; now look !"—and with a slight elastic movement, giving his body an upward swing, he at the same instant let go of the door-handle and grasped it again ; but this time only with three fingers, leaving forefinger and thumb free. " There, now they are at liberty ; but to get them so, I was, you see, obliged to risk that movement, and be for a moment without hold or support."

then tried to find the holes in the eyrie which I had bored with my hands when climbing up.

This was a difficult and fatiguing affair, and lasted terribly long; because, my head being pressed close up against the side of the nest, I could see nothing, and was only able to feel my way with my hands and feet. The top of the uppermost ladder inclined backwards more and more as I descended, making full two feet at each round. It was only after a long search, and after snapping many a dry branch, that I succeeded in finding again the holes in the nest; but I found them at last, and thus, by care, perseverance, courage, and presence of mind, I descended the three ladders and came back again to my men; and, except that my hands were much torn by the brambles, quite unhurt. Those below believed that they had seen the accomplishment of an impossibility: and they confessed that several times they were unable to look up, so giddy had the sight made them. As long as I was standing on the ladder I was in a complete perspiration; so that literally the moisture ran down into my shoes; and, on coming below, I for a long time was unable to hold my hand and arm quiet, so much did they tremble from the great exertion. But now all was happily over, and the whole troop—those above as well as those below—burst forth into a loud and long “Hurrah!” making the surrounding mountains re-echo with their shout. When the others

came down and saw the ladders standing, they would not believe what they saw, and looked on the affair as miraculous.

It was not a miracle ; but I think myself that no eagle had ever been taken from an eyrie in like manner ; and I must confess, as I am the only one who can judge of the difficulty and the danger in their full extent, that nothing whatever should induce me to make the attempt a second time. It is a feat—and I may say it without being at all accused of want of modesty — which is to be placed among those extraordinary things which rarely succeed once, but never do a second time. Had I known beforehand how the thing really was, I should have been the last to have attempted it ; however, the attempt once made, you not only trust to your own powers more and more, but you also learn how to employ them to the best advantage. Moreover, the remembrance, with perhaps a certain fatalistic feeling, that “not a sparrow falls to the ground unknown to God,” has often caused that to be accomplished which seemed really impossible. .

By six o'clock the whole expedition, the young eagle in triumph in the van, had returned to Rohrmoos, where all that is here related was told and talked over till late at night, amid rejoicing, noise, and festivity. During thirteen hours none of us had tasted any thing ; and the enjoyment of the creature comforts, after such

long and excessive exertion, contributed no doubt very considerably to our joviality. The next morning I took the youngster to Munich, where he stayed for a fortnight, receiving meanwhile numerous visits. He is now at Königs See in the enjoyment of perfect health, placed opposite his comrade whom, two years ago, I took out of a nest on the Untersberg, letting myself down to the spot by a rope. Whoever would like to see them can do so and welcome.

This was not the first time Count Arco had rendered vain all the precautions of the eagle to secure her young from the depredations of man, by building the eyrie in a spot seemingly inaccessible. A few years previous he had taken an eaglet from the nest under circumstances quite as difficult, and with a boldness no less daring than was shown in the foregoing adventure. The scene of his exploit was the Guhr Wand, close to Hallthurn near Berchtesgaden. The precipice, on a ledge of which the eyrie was situated, is about eight hundred feet in depth; a perpendicular wall of rock. Those who have been much in the mountains will know that on such places, smooth as the face of the rock is, little projections are to be found, large enough to allow a fir tree to grow there, or — should he by some incomprehensible arrangement be able to get there — for a human being to stand upon, without, however, having any room to spare. It

was so difficult to hit upon a plan that offered a chance of success, that the Count and two jägers were eight days examining and searching before it could be decided where it was possible to make an attempt. They observed, as well as the overhanging rock would permit, that some distance down the precipice was such a ledge, where a man could find a footing. This was fifty feet from the top of the rock. Rooted in the crevice of a rock lower down was a fir tree, which shot up its branches thither. Having fastened a rope, knotted at intervals, to the top of the precipice, the Count let himself down over its side; sometimes steadying himself with his feet, but otherwise swinging in the air. Having reached the small ledge, where he found but just room enough for both feet, he saw that the only means of coming nearer the eyrie, would be to descend the tree, whose branches rose past his present standing place, and thus get thirty or forty feet lower down the precipice. Having thus far decided on his plan he climbed up his rope, and the next day returned with a hatchet and his gun to the same spot. Descending by the rope and having fastened it to the tree lest it should swing beyond his reach and thus prevent his return, he hewed away some branches and reached the narrow ledge where the fir had fixed its roots. From here there was no possibility of going farther except by fastening another rope to the trunk of this tree, and letting him-

self down to another ledge which he could see below. So, mounting tree and rope again, he went home, to return on the morrow with the second rope. It may be thought that all this might have been foreseen beforehand, and where to go and what to do have been decided on by inspecting the territory well from different sides. But this is not the case, as all those know who have had experience in such matters. A spot which at a distance seems absolutely impassable, presents on nearer approach many a bit of vantage ground, where a bold climber may make his way. And on the contrary, also, a closer inspection will bring difficulties to light which, as our eye examined the place from afar, did not seem to exist. It is only by a personal acquaintance, therefore, that we can decide whether a passage be practicable or not. For a jutting stone, a firmly rooted shrub, a foot more or less in the distance we have to stride or reach, is often sufficient to force us to turn back or enable us to go on. "Try and see," is the only course to be followed in these matters.

To approach the eyrie itself a ledge must still be passed, which, narrow as it was, might have been crossed had there been any object to hold on by. But there was nothing whatever; so again recourse was had to a rope, let down from above; and holding by it the Count began his difficult walk, and arrived in this manner at the eyrie. But he did not take away the

eaglet; he wanted, first, to test the possibility of getting there, and, before carrying off the young bird, to bring down the old ones with his gun. Having now discovered *how* to reach the eyrie, and ascertained that the eaglet was well and nearly full-grown, he left him there for the present. For eighteen days he descended at dawn to the ledge, and returned in the evening, keeping watch there eighteen hours at a time. He generally left home at one o'clock in the morning, and reached the place where he was to begin his descent by three: an hour when, in the month of July, it is already light.

At last one of the old birds was shot. The other did not return for a day or two; and Count Arco, who had seen how large and nearly full-fledged the eaglet was when he visited the nest, began to fear he might leave the eyrie. As the remaining eagle seemed shy of returning now that her mate had disappeared, he feared the young bird might be in want of food. So he resolved once more to pay his young ward a visit. Lest he should be hungry, he took a cat with him, which he flung into the eyrie. But to make quite sure of his prize, he tethered the bird to the nest, so that he might certainly be there when he next came to fetch him. When the second old bird was at last shot, he went a third time to the eyrie, and took the eaglet. He was already quite brown, being full-grown. He resisted

manfully; and his screams, shrill as a railway whistle, were literally deafening. During two hours and a half he did not cease to utter them for a moment. Though his feet were bound, his efforts to escape were so violent that it was impossible to hold him in one hand longer than two or three minutes at a time, such was the muscular power in so young a creature.

It seldom falls to the lot of one person to accomplish successfully two such difficult and perilous undertakings as are here related: to shoot ten eagles and take two alive. But then there are few, even among the most practised mountaineers, who would have the nerve to adventure where Count Arco went. Success in either case did not depend on patience merely, or perseverance, necessary as both were; but on well-authorized self-reliance, on a steady eye and firm foot; great muscular strength and activity of body, as well as a resolute, unwavering heart: in a word, on hardihood equally daring to conceive and to carry out the plan.

In closing this chapter, I beg to acknowledge the very kind assistance afforded me while writing it by Count Max Arco. I am indebted to him for many hints which his experience and knowledge of the habits of the eagle enabled him to give me.

HOMER A SPORTSMAN.

“Nec sutor ultra crepidam.”

THERE are certain matters which no one—even he who is endowed with the highest genius—can correctly describe, unless he have seen the thing itself with his own eyes, have been an actor in the drama alluded to, and have gained his knowledge of the events he would picture to others from that best of all masters—experience.

A picture or a poem may be admirably faithful in its general delineations of particular scenery, or time, or pursuit; yet, if the artist have obtained his particular knowledge at second hand, or have trusted to that intuitive perception which genius gives, he will most certainly commit some error which the technical man will at once discover. The error may be but in the difference of a shade, in some small omission, in bringing together at the same moment events which could not possibly be collateral, but could only succeed each other; in the position of a limb, or the manner of holding an

implement : each in itself the merest trifle, which the million would not perceive, but which the initiated—he of practical experience—would at once observe ; and he thus would instantly discover that the author or artist was not at home in that thing which he had delineated or written about.

An amateur performance, however good it may be, always betrays its origin to him who is more than an amateur ; for, be as much pains taken as there may, some little tell-tale incompleteness, or too anxious finish, will characterise at once the author of the handiwork.

Only a practical fox hunter could write about a run as Harry Hieover has done, or a man who had lived at sea tell of sea-life like Captain Marryatt. For there will be some very little things which the *dilettante* will overlook, and to others which strike him particularly, he, the novice, will attach an undue importance.* A disproportion, a want of harmony, is thus produced ; and

* “So dangerous, however, is it for the ablest man to attempt speaking of what he does not understand, that, as a sailor will detect a landsman, however expert in the use of nautical diction, before he has uttered two sentences, so with all his art and finesse, and speaking besides to questions of his own choosing, yet cannot Schlegel escape detection in any one instance when he has attempted to act the philosopher. *Even when the thing said is not otherwise objectionable, it generally detects itself as the remark of a novice, by addressing itself to something extraneous in the philosophy, and which a true judge would have passed over as impertinent to the real business of the system.*” — *De Quincey, Note 6 to “Letters to a Young Man.”*

it is this which causes the unpleasant sensation we experience, when reading an account of any process with which we are familiar by one who is not so. It jars upon our ear to hear incorrect terms applied to our favourite pursuit: a gap is felt to exist between ourselves and him who uses them, and, wrongly or rightly, we are sensible of a movement of estrangement in ourselves and want of sympathy towards him. And though each one finds this an exaggeration in another, when it occurs in his own favourite occupation or pastime he is not a whit less susceptible.

As we observed above, genius will enable a man to behold with his mental vision much that his bodily eye has never seen; and it is just the prerogative of genius to know by intuition what it has not learned by the ordinary steps to knowledge. Hence every man of genius is more or less a seer. But in characteristic *detail* even genius would be at fault, nor would know of it without having been a veritable eye-witness. Genius, for example, could not describe the peculiarities of the wild-duck; of its flight, its rising from the water when disturbed, and its manner of alighting again on the mere, unless these things had actually been *seen*. A single epithet may furnish a completer picture than an elaborate description; but he only can find such epithet to whom the event so described is a familiar, oft-seen thing. No dweller in a country where there

was no winter, and consequently no thaw, could describe the spring-time change as Thomson has done by "the frost resolves into a *trickling* thaw," or have told how, over the pool, the icy gale "breathes a blue *film*." Here not even genius would have supplied the place of personal observation. And when we read his account of the hare,

"Scar'd from the corn, to some lone seat retired,

Of the same friendly hue, the wither'd fern ;"

and now on

"The fallow ground laid open to the sun,"

with

"Head couch'd close between her hairy feet,

In act to spring away,"

we at once feel certain that he well knew the animal, and wrote from personal experience.*

* How different his accounts of matters which he knew only by hearsay, and which he had no opportunity of seeing! Fancy then has to lend her aid; and the result is a bit of painting quite satisfactory to those who know nothing about the matter, but which in reality is no picture, only a daub. Speaking of the wild boar, he says,—

"Or, growling horrid, as the brindled boar

Grins fell destruction."

Here all the epithets which are meant to be characteristic and consequently effective, are powerless, because incorrect. The boar does not "growl;" he generally is not "brindled" but black; and at no moment the features of the boar could warrant the expression "grin."

In the account of a stag hunt, the incidents he had *seen* are alluded to with all that felicity of epithet, which we find everywhere in "The

And this leads me at once to the honoured name at the head of this chapter. Homer's description of certain animals of chase, of their behaviour when attacked, and that of the men and hounds that are attacking them, is so exact, so true to the life, so thoroughly characteristic always of the creature pursued, that it is absolutely impossible such knowledge could be obtained otherwise than by personal experience. He himself must have been present; he must have been alive to all the developed instincts of the game, and have watched every feature and every act as he only will do whose whole heart is in the sport.

Throughout the Iliad are continual recurrences to the chase, and from it Homer draws his most dramatic and stirring similes.

First as to his acquaintance with the wild boar, book xvii. The progeny of Panthus are said to be

Seasons;" whilst, when touching on those matters of which he has but vague notions, he is all wrong. The hounds, we are told, "sure, *adhesive to the track, hot-steaming* up behind him come." Thomson had seen the pack following the stag when the scent was good, and hence this perfect picture; but he did not know that the contests, which take place between the stags in the rutting-season, are not "*kind* contests," but deadly jousts with hated foes, not "friends." He did not know either that the animals he had seen in parks were not stags; and being ignorant of the difference between red deer and fallow deer, he speaks of the pack, now that the stag is at bay, marking "his *beauteous checker'd* sides with gore." The fallow bucks he had admired being checkered, he believed that the stag thus hunted was dappled too.

not more fearful than a lion or panther, "or the boar of the forest so fierce, which above all other animals, *with great rage in his bosom, comes snorting onward with threatening strength.*" Again, the *rush* of Ajax dispersing those striving to retain the corpse of Patroclus, is compared to that of "a *defiant boar breaking through the underwood*, that on the mountain easily routs the hounds and the vigorous hunters."

At the end of the same book, also, when the dead body is being borne away to the fleet, the Trojans make a charge to recover it, but flee back again on the Achaians turning and making a stand, there is this admirable simile: "They ran straight on, as hounds *rush in upon a boar that has been wounded, in advance* of the youthful hunters: at first they hasten forwards, animated solely by the *longing to annihilate him.* But *as soon as he turns round* upon them with his sturdy (defiant) strength, *all fall back*, and disperse hither and thither."

Every feature here is characteristic, every designation exactly applicable, every little circumstance a study made on the spot. What a picture that is of the boar, "with great rage in his bosom, coming snorting onwards with threatening strength!" And how admirably true, not only as regards the physical appearance of the animal, but as to the impression also which his air, and gait, and carriage leave on the spectator! For

at such moments his whole manner speaks of foaming anger within.

And to whom, but one who had *seen* the fury of hounds in presence of a "*wounded*" boar, could have occurred the expression, than which absolutely none better could be found, that they had but one longing — the desire "*to annihilate*" him. Not to kill, nor to mangle, nor to devour, but to *annihilate*. It seems as if nothing less would satisfy them. They yell, and shriek, and rage with convulsive madness, in their unappeasable, unsatiated a-hungering to utterly destroy. What more fitting word could have been chosen to depict the whole animal at such times "*when breaking through* the underwood," than "*defiant?*" On he dashes then, with body leaning forward and tail erect, and every limb — ay, in every limb is resolute, sturdy, unflinching defiance.

In the twenty-second book, when Achilles pursues Hector, allusion is again made to the incidents of the chase, and both hart and hound are sketched with characteristic touches. And it is just such characteristic sketch, dashed off at a stroke, that indicates a mastery, and the capability of executing, if required, the parts here passed over; whose effect, taken together as a whole, has notwithstanding been seized on and given.* Only he who is acquainted with *the whole* of

* My very dear friend John Constable was once sketching an old tree

any thing, can thus seize on the salient features, and so with a word or a touch, give reality and life.

“As when the hound has put up a stag and follows him, roused from his bed, through winding valley and through the bushes, and although he *hides* and *ducks down* among the shrubs, the hound — tracking animal! — still keeps running round, till he has found the slot, so ——” &c.

Who that has lived in the forest will not *at once* recognise a comrade in the author of these words? As an old stag steals away when roused by some unusual noise in the neighbourhood of his haunt, he will stop from time to time to listen, and will hide himself in the thick covering of a thicket, listening the while with breathless attention if the sounds recede or approach. If the hiding-place be good, he will peer from between the leaves with his large eyes and watch you coming near, and deeming himself secure from being observed, will let you pass close to his retreat without stirring. And if your movements give him no cause for mistrust, there will he remain listening, gazing, breathless; as immovable as the sod on which he stands.

at the end of Well Walk, Hampstead, when a lady whom he met said, “Well, Mr. Constable, I only wish to be able to make such a drawing as that; I do not want to do more, or make something more finished: a sketch like that would quite satisfy me.” “That is all very well, Madam,” Constable replied; “but in order to make a sketch such as you wish, you must be able to do *what I can do besides*.”

But should a sound, or your eye, or your behaviour tell him it were better he were moving, he will at once seek the thicket, if such be near; and if here or there the shrubs be less high, and a break in the denseness risk exposure to view, he will "*duck down*" among them, and so steal along, making himself as small as possible.

In book iv., where the King reproaches the troops with their faint-heartedness, we have this picture: "Why do ye stand thus bewildered, like hinds that, exhausted with running across broad fields, stand still, their hearts void of all strength and courage? So do ye stand now quite *mazed*, and *stare* into the battle."

Any one who has watched a herd of deer that have stopped at last after fleeing from some danger, and seen their bewilderment and their helpless "*stare*," will appreciate this description.

Of the truth of these picturings I can judge by personal experience; there are others, however, recurring at short intervals throughout the Iliad of which I can form an opinion but by comparing them with the graphic accounts of one who was himself an actor in occurrences similar to those which Homer describes. I allude to the characteristics of the lion, as well when attacking, as when attacked, and also his treatment of his prey: the behaviour of the herdsmen when in his presence, and other features peculiar to these occasions.

All that he relates is in perfect accordance with the details given by Jules Gérard in his interesting volumes. There are certain things which no one would ever think of, and consequently could not introduce in a description unless they had been witnessed.

Gérard describes thus a lion making his appearance when molested. “C’est un grand vieux lion arrivé dans la nuit. Attendez un peu, il vient de quitter son repaire. Il marche, *les yeux à demi fermés*, il n’est pas encore bien éveillé.” And Homer : — “ Suddenly there meet him in the forest men who are hunting, and he grows irritated ; he draws down his wrinkled brows, and covers thus his eyes.”

This appearance Homer must have seen in the lion, for unless actually beheld no one, poet or other, would ever think of introducing such circumstance, it being quite beyond the pale of invention. Indeed, had it not been mentioned by one who, like Gérard, is thoroughly familiar with the habits and ways of the lion, every reader would suppose it merely an exercise of the imagination which the poet had allowed himself for the sake of effect. In another passage, Gérard also mentions this peculiarity of the animal when disturbed, or when roused from sleep : “ Il m’examinait avec beaucoup d’intérêt, tantôt en clignant les yeux, ce qui donnait à sa physiognomie un air des plus benins, tantôt en les ouvrant de toute leur grandeur.”

“The men and dogs standing in a crowd at a distance from the lion and crying out *incessantly* and *loud* without daring to approach, pallid horror did so possess them” (book xvii.); or a little further on when a lion appears near the fold, and all around, men and dogs, scare him away with lances and shoutings; all this is the very same as what Gérard relates of the Arabs and of their lion hunts at the present day.

How exactly too in accordance with Gérard’s accounts of the infancy of the lion, and of his parental education, are the words of Homer: “He leads his weaklings about *like a father*.”

In book xx. the account of the hunt is as if Homer had copied his description from Gérard: and had the two men been contemporaries, there is no doubt but that the reviewers would have reproached the Greek with being a plagiarist. “Achilles advanced as a lion approaches, full of rage, when a number of men who have collected — a whole tribe — come on, burning to slay him: proudly and disdainfully he at first steps along^{*}; but as soon as a bold youth has struck him with a javelin, yawning he crouches to spring[†]; and from his jaws foam drops, and his great heart groans inwardly. With

* “Il arrive quelquefois qu’il entend les pas des chasseurs ou une pierre qui a roulé, et alors il se lève et marche dans la direction du bruit.”

† “Le lion est rasé à la manière du chat, afin de mieux bondir et d’offrir moins de prise aux balles.”

his tail then he lashes right and left his thighs and his mighty ribs *; urging himself on to the combat. With piercing looks he glares right in front of him; onwards he rages to kill a man or be killed himself in front of the battle."

And the account (book xvii.) of the lion watching before the farm or fold at night "hungering for flesh;" how when the alarm being given, he is prevented from stealing "the fat of beeves," he still watches through the night; and "the brightly-burning brands which brave hands hurl against him;" how like all this what we read of the *douar* at night! "Un lion qui n'a pas diné, et qui, vu que l'heure avancée de la nuit, se sent fort en appétit, arrive de son côté. . . . Notre lion s'est couché et il attend; mais les chiens, qui ont vu ses yeux ou qui l'ont flairé, font un tapage d'enfer. L'éveil est donné au douar, tout le monde est sur pied. Les uns crient, les autres tirent des coups de fusil en l'air.

"Les femmes rallument les feux, et jettent des tisons enflammés."

In little traits too, the two authors tally exactly in

* "Le lion s'était arrêté fier et menaçant. Qu'il était beau avec sa gueule béante, jetant à tous ceux qui étaient là des menaces de mort!"

"Qu'il était beau avec sa crinière noire hérissée, avec sa queue qui frappait ses flancs de colère!"—*Gérard*.

their accounts. "Like lions (book xiii.) carrying off a goat through thickly-growing bushes, *holding it* in their bloody jaws *high above the ground*." And even as regards the part of the body seized on when an attack is made. Gérard, speaking of the young lion's education says, "Ce n'est qu'à deux ans que les jeunes lions savent *étrangler* un cheval, un bœuf, un chameau, d'un seul *coup de gueule à la gorge*;" and Homer, when the lion chooses a cow from amid a grazing herd, "*he crushes her neck*, seizing on it with his mighty fangs." Indeed, whenever this animal is alluded to, an intimate acquaintance with his habits and instincts is developed.

These allusions to the chase of the lion, the stag, and the wild-boar, are taken from the following books of the Iliad: iii. iv. v. xiii. xvi. xvii. xviii. xx. xxi. xxii. There is the same feeling for the chase in each of them, the same knowledge of the animal described, the same attention to minute circumstances which a hunter only would lay stress on or take cognisance of. Without entering on the philological part of the question, these facts would strongly incline us to believe that the Greek epic was the work of *one and the same man*, and not a collection of songs by different men, which had been brought together and put into their present form. If in our own day we were to find in a

volume of poems continual allusions made to a certain art, which not every one is supposed to be intimately acquainted with ; and, moreover, all breathing the same spirit and betraying the same knowledge, the natural conclusion would be that these owed their existence to a single mind, to the mind displaying just such particular bent.

This individual opinion is given for as much as it is worth. I am aware the point of view here taken whence to form an opinion about a classical work, is quite a new one ; but it is neither the better nor the worse on that account. It may possibly assist the more learned critic at a point where he finds himself at fault ; it may chance to supply a link where there is a break in the chain of literary or archaiological evidence. A trifle, if it be seen by one—even the most uncultivated—who understands the technical peculiarity, and knows what inference is to be drawn from it, may throw sudden light on a subject, and clear up that which before was shrouded in mystery.

When Charles II. was escaping to the coast, his disguise carried him safely through every danger, and the sharp-witted found nothing suspicious about the two travellers on horseback. But in the account they gave of themselves, it did strike the village blacksmith who shod one of the horses as contradictory, that the steed

should have on a shoe evidently made in one county, while the two men asserted they had come from another.

This bit of technical knowledge and blacksmith observation might have effectually stopped the King's career; and thus have accomplished what Parliament, Cromwell, and army were unable to achieve.

HINTS.

THE following observations are such as any one who, with rifle in hand, had been much in the forest or on the mountain, would himself have made over and over again. They consequently are not given as containing new information, for their substance is merely what experience would have taught any other man as well as myself. But they are added here as a hint which may, on occasion, be found of some use to those who have not yet had the opportunity of gaining that experience. I have lost many a good stag, and more than one chamois, by non-observance of *the little things* to which attention is directed in this chapter. I heed them now: I have been taught to do so by the consequences of my neglect of them; and even to this hour I look back with self-reproach on the chances which, owing to heedlessness or over-haste, I have allowed to escape me. For these chances, like lost hours, are not to be recalled.

To the true sportsman such untoward events cause a

lasting regret. He who can recur with indifference to an opportunity when, but for some fault of his own, he might have brought down a famous stag, is, I say, no *true* lover of the "noble art." His heart is not in the matter, and it is a pity that such one should carry a rifle at all. With indifference he will never make much progress in woodcraft. When one who knows how to appreciate his good fortune is so happy as to slay a splendid stag, or some sturdy chamois buck, I can rejoice with him and share in his exultation, well knowing how great is the delight. But when, by mere chance, such prize falls to the share of some cold, *immovable* person who is as little excited by it as by the commonest circumstance, I own I begrudge him his success ; begrudge it him sincerely and heartily.

Experience is the only thing that cannot be obtained otherwise than by buying it, and generally we find it more or less dear. I am aware that no lesson can be so good, or effectual, or will remain so indelibly impressed on the memory, as one learned through such medium. And the knowledge thus acquired in the chase we heed carefully, because it concerns ourselves in particular, and it is we who are specially and at once affected by our neglect of it. But though this teacher is, undoubtedly, by far the best, a hint or two beforehand may enable us all the sooner to derive profit from his lessons, hereafter to be received.

Wherever you may be—I mean when out with the intention of shooting something—walk as quietly, as noiselessly as possible. Whether you are near the post you are to take, supposing the game is to be driven, or if not yet arrived at the ground where the game is expected which you are in quest of, still let your footsteps *and your tongue* be as low-sounding as though you were close upon their traces. You never can know if some out-lying animal may not be near. I have found stags couched in thickets which were so small that it would have seemed ridiculous to pretend a deer might be lying there. If you advance quietly and prepared, you are enabled to take advantage of any chance of this sort; but should you little heed how you get over the ground, or chat the while to your companion as you go along, the game that happened to be in so unusual a spot, and which with more caution you might have called your own, will be up and away in time to avoid your closer neighbourhood. And you need never tell yourself, “*Now* there is no need of caution: there will surely be nothing here.” *In the most unlikely places* I have been taken by surprise in this way. You never may say with certainty where a head of game may *not* be.* It was but the other day (November 4) that, on coming down from the top of a mountain in the Tyrol, a case in point occurred. I had shot a chamois in the

* Of course I speak of districts where game is known to abound.

morning, and climbed up to and over the ridge, in order to descend and reach a village in the valley on the other side. We had been descending for more than an hour and got from amid the snow and the bare rocks, and had reached verdure and the intertwining *Latschen*.* Though the ground was rugged and broken enough, yet, in comparison with the region above, which we had just left, it looked almost cultivated. And this, and the sight of dwellings and roads, and the village church spire far below us, no doubt produced the impression of being lower down the mountain than was really the case. "You need no longer move so cautiously," said my companion to me. "We shall see nothing more, so you may turn your pole again now;" for, in order that the iron point might not ring against the rocks, I was using the upper end which was unshod; and we went on, peering no longer below in expectation of finding something. We agreed to stop at a little knoll in front, and eat our breakfast there, and were laying down our rifles without once looking in front, when my comrade, seizing my arm and bending to the earth, exclaimed, "A' Bock!" And there, indeed,

* *Latschen*, *Pinus pumilio*, is a sort of pine found on the mountains, growing on their barren sides, or out of the crevices of the rocks. It does not at once grow upwards, but creeps along the ground for some distance before its branches rise perpendicularly. Its foliage is dense and bushy, and forms a good covert for the game.

150 yards below us, was a chamois just leaping away into the bushes. Had we been advancing with the caution we had observed till then, I might have shot him easily. Chamois very frequently wander far down a mountain, just as a stag will sometimes hide in corn or bushes only high enough to conceal his prostrate body. Be therefore always as heedful as though you were aware that game was immediately in front of you.

If there is a drive, *as soon as you reach your appointed post make yourself ready*. And because you may have half an hour or an hour before the drive begins, do not on that account be careless and inattentive during this time. The game may be on the move, or come near you of their own accord and before a beater has stirred; and if you are not watching, it steals away unobserved or observed only when too late. It may happen, too, that a deer is close to the spot where you are standing in the wood, watching you, perhaps, and waiting to observe your doings.

Once when in the forest, expecting the moment when the drive was to begin, I by chance after a time looked on one side of me, and to my surprise beheld three stags all gazing and wondering at my presence. I dared not move to seize my rifle, or they would have been off in a second; but had I been more attentive I might have been ready for them as they approached, or have brought my rifle to my shoulder before they had been so long

at gaze. In the chapter on the stag is also an account of one that was close to me for some time before the drive began, watching quite motionless to see what was going on. On another occasion, when several of us together were traversing the wood, we left one of our number at a certain post, and hardly had we quitted him when he fired. We found afterwards that, just after he had reached the spot, a stag that was in the thicket stole forth ; but he being all attention perceived it, and with one shot stopped his career. These are incidents, it is true, which do not often happen ; but that they happen at all is sufficient reason to be prepared for them.

When taking up your post anywhere to await game, at once scrape away with your feet the dead leaves or dry twigs which may be lying on the ground where you stand. You cannot stay long without some movement, and the dry brittle leaves make a loud rustle in the stillness as you tread upon them in changing your position. An old stag is never precipitate : he will come on very stealthily, stopping every moment to listen ; and an ill-timed movement of your foot might be sufficient to make him turn away in another direction. For, by some means or other, game distinguishes between the sounds produced by natural causes and those *you* may chance to occasion. A stone set in motion by the thawing warmth of the sun will frequently

roll down clattering over the rocks, and the chamois, scarcely looking up, go on grazing as before. Yet if *you* dislodge but a pebble as you creep onward, it is sufficient to terrify and put them to flight. Hardly has it rolled a few feet when the steady gaze is followed by a sharp whistle, and off they all go in their instantaneous sense of danger. And in the forest the same will occur. A topmost dead branch will break, and, tumbling through the other branches, come with a thump on the ground. The herd of deer, or the old boar close by, just look round and that is all: but when I, in approaching, inadvertently cause a twig to snap, they are alarmed at once, and all hope of getting near them is at an end.

If a branch obstruct your view, *lop it off* rather with your hunting knife than break it. The snapping of a bough is not only heard far, but the sharp sound seems easily to startle game.

Should it happen that you have to remain a long time at your post, do not on that account, let your attention flag. *Be watchful to the very last moment of your stay.* This, believe me, is a golden rule. For it is just then, very often, that the game will appear. Because you have been there nearly two or three hours or more, and have seen nothing, that is no reason you may not do so yet. Nor be lazy either, and lie down when you think "Oh! it is no use watching any longer, nothing will come now." On a hot summer's day when

the wood had been driven for red deer, after waiting long I lay down under a tree, thinking it was in vain to expect the game any longer. Presently there is a shout, "Look out! The stag!" and instantly, on the slope immediately opposite, a magnificent stag emerged cautiously from the thicket. Had I been waiting properly, I should have brought him down on the spot, instead of which a start from me sent him back again into the wood, when the report of a rifle to my right told me he had been shot. This happened nearly twenty years ago; yet I never think of my carelessness, and of the splendid antlers of the noble stag thus lost, without still feeling vexation and regret.

Never leave the post assigned you until some preconcerted signal or the presence of others of the party announces *surely* that the drive is at an end. By going away too soon, you not only spoil your own sport, but that of others who are with you.

It is of course known to every one that, when waiting for game, it is necessary to stand still; to turn this way or that as little as possible. Choose your position, therefore, so that, as you stand, you may command the game in the direction it is most likely to come. And this must be attainable without having to turn much. Now suppose it to be as likely that the game approach from the right as from the left side. It would be advisable to stand facing rather the approach *on the*

right; because, should, after all, the game show itself on your left hand, you can, by a very slight turn of your head and shoulders, easily bring your rifle to bear in that direction; whilst if, on the contrary, you stand facing to the left, or even directly in front, you will be forced to wheel very much round in order to aim to the right, should you have to fire on that side. This is clear, and necessarily arises from the inclination of the head and position of the arm, as the rifle is brought up to the right shoulder. And yet it is possible that its awkwardness might not be discovered, till its inconvenience had been felt at some decisive moment, and the loss of a shot, perhaps, occasioned by it. *Unless already facing thither*, you are obliged to *turn your whole body* in order to get yourself round so as to enable you to aim on the extreme right; a movement quite sufficient to startle any animal. Whilst *vice versâ*, you have only to turn, *on a pivot as it were*, a small portion of your body in order to fire on the extreme left.

When once settled at the spot where you intend to await the game, cast your eyes about in order to reconnoitre the ground. See where it is most probable the game may approach, and how, and at what distance. Ask yourself if, should it come yonder, you could fire conveniently, or even if it would not be too far to fire at all. You see the ravine at your left, and, in your

self-commune, you say it would be better not to fire as it approached thither, when it would probably come at a round pace; but to wait till it reaches the opposite side, where it *must* come, and where, being steep, the animal would mount more slowly. Familiarise yourself thus with the ground before you, so that, let the game come as it may — across yonder knoll, down that slope, or passing among those trees — you may not be taken by surprise, but be ready for it, and not in doubt about the distance. You will find this a great advantage to you: you will feel at home there, as I may say; and will not be so likely to get flurried at any unlooked-for circumstance.

Do not sit down unless you are able to turn well round, or when the game *can* come only in one direction. Should you be seated, and it makes its appearance in an unexpected direction, you will find yourself greatly embarrassed how to get up and move round unperceived. If already on your feet, the difficulty is greatly lessened. By standing, too, you command, generally, a greater range of view.

Be more careful of having something *at your back*, than of getting a bush or other object to screen you *in front*. When there is no bush, or bank, or rock behind you within a short distance of your person, the outline of your body is so clearly visible, as to strike any comer, whether man or beast, at once. Such unusual shape will surely startle an animal. But if you stand against

a tree, and there is nothing before you, so that you are exposed from head to foot, the outlines and colouring of your person so amalgamate with the stem, that, supposing you be still, neither man nor beast might perceive you, though coming in your immediate neighbourhood. In the mountains of Bavaria I lost two chamois by inattention to this. I saw them at a distance, but as all around was bare, there was no possibility of stalking them. I sent the young forester round on the other side, to show himself at a distance; I meanwhile taking up my station against a block of stone, not far from where I knew they would pass. But though the fragment of rock came up to my back, my head rose above it, and, as the spot where I stood was high up, had nothing but the sky behind it for a background. Hence my head and shoulders were strikingly visible. In due time the two chamois approached; but suddenly halted a long rifle-shot off. They stared at the unusual appearance which they directly saw against the sky, and came no nearer. They could not make it out; they had not seen it there before, and they bounded off straight up to the crest of the mountain.

Disregard no sound you may hear when thus on the watch. Indeed the ear often renders as good service to the sportsman as the organs of vision. Your hearing, it is true, must be very acute to detect the stealthiest movements of an animal in the thicket; but if it be so,

it will often give you a welcome forewarning of what is to come. I think I owe as much to my fine sense of hearing as to my sharp sight. As was said, the very slightest rustle possible is not to be disregarded. It may be so gentle as to seem only as if a worm in gliding had touched a dry leaf; or a beetle as it crept over the ground. Heed it nevertheless, and be prepared. Have your hand ready, and eyes, and more especially the ear, more open than ever. Though a stag be so large an animal, yet he will move in the densest thicket without a sound more loud than that which I have just described. How he manages, I know not: but he does so.

And after such gentle motion, all will be quite still, and it may be long before such scarce audible rustle be heard again. No matter. Heed it nevertheless, I say, and be prepared. You catch the sound once more, and again all is still as death. Be equally still; and, as to moving, let nothing move but your eyes. Breathe gently too; as gently as possible. Look now! There he comes, as silently as a shadow, with outstretched neck and horns flung back, from between the leaves and branches. Wait one second! And don't even move your eyes now! He steals forth like a fox, and as he comes raises his head and stares round. Now then, be quick and steady, and he is yours. In the wood you cannot be too attentive. Strain your ears to catch the faintest sound. To this attention alone I owe the best

two stags that I ever shot. The one, in Suabia, was in a small but dense wood. There was a rustle, but it was so low that not one in a hundred would have heard it, or have taken it for anything but a dead leaf dropping to the ground. I stood immovable, with eyes fixed on the thicket, trying to penetrate the interlacing branches. I was right: something moved. I saw somewhat like the tip of an antler, and now a patch of reddish brown. Steadily aiming, I fired. There was a plunge, and a rush, and a galloping; but presently we came to the spot where, with his majestic crown overthrown, this old monarch lay dead. Had I been less attentive he would have escaped my notice and turned back without my seeing him.

When a rivulet is near, you must, if possible, redouble your attention. Low as its murmur is, it drowns all other sounds, and you are obliged literally to strain your hearing to the utmost to be soon cognisant of any movement in your neighbourhood. Here, therefore, it is your eyes which must be on the alert: whilst in cases like the above it is the ear which must serve you in most stead.

While on the watch take heed of the movements of other animals besides those for which you are on the look out. Their appearance is often the forerunner of the game you are waiting for. A bird suddenly rising and fluttering out of the thicket without any apparent

motive, will be followed, not improbably, soon after by a stag, a deer, or roebuck. It was they, in stepping along, put up the bird and made him fly off, uttering his peculiar cry. Or a hare may suddenly come emerging from the wood, and on without stopping across the open space towards another coppice. There must be a cause for this. The wood has been disturbed somewhere far back yonder; and Puss at once made off. It is therefore to be expected other game will soon follow; for it is evident the animals are on the move. You will soon hear their footsteps along the sounding wood, and there is nothing pleasanter than listening to such foot-falls. The boar comes along grunting; so he is to be heard easily enough, except occasionally when he suspects danger, and then he is as still and as stealthy as any old stag can be. He will stand in a bush for a long while immovable: looking, listening, and with his sensitive nostril distended, trying to discover "what's in the wind," and whether he is safe or not. And at last, when he does emerge, he glides forth as noiselessly as when the shadow of a cloud moves along over the landscape.

Nor let the movement of a branch or the waving of the young tree-tops pass unheeded. If there be no breeze, and you nevertheless see yonder the tips of those slender birches moving to and fro, there *must* be some living thing below which causes them to wave. Most likely deer are there whose bodies press against them

as they pass. Look out, therefore. You hear nothing, absolutely nothing. But yet that bush right in front moved somewhat, and the twig hanging by a thread at the end of the bough is still rocking in the motionless air. Some animal therefore *must* be there, or it would not move thus. It is probably an old boar, who, before he ventures further, is thence reconnoitring the ground. Three years ago I was in the mountains after a stag in the rutting season. I followed him by his bellowing, but when at last I got up to him, he ceased his roar, and as he was among bushes I could not discover his exact position. But presently the top of a young tree wavered, *while all the rest were still*; so now I knew exactly where he was, and could proceed accordingly. But for that circumstance I should have waited in uncertainty till the stag had moved on, and left the thicket in the opposite direction.

But though you take heed of the appearance and movements of other animals, do not let them engross all your attention. I mean to say, you are not to amuse yourself by following their motions, by watching their play; and thus while diverting yourself with them allow your attention to be drawn from the main object. When in the quiet forest, and I have been waiting breathlessly, sometimes a fawn has skipped forth into the sunshine; or a roe has appeared with her pretty fawn; or a squirrel has jumped down right before me

on the ground, and then darted upwards on the trunk of a tree. And it amused me to see how unconscious they were of my presence: and I have watched their gambols and their looks, and have laughed at their droll ways. And so I have whiled away the time instead of looking round, and minding what I was about. Meanwhile, the game I was waiting for approached and stood before me; but I, not being observant, did not see it until it was too late. And all this it is which you are *not* to do.

As the rutting season advances the stags will generally be found in the train of the hinds. If therefore you see a herd of deer with their calves passing from the wood, do not follow them with your eye, diverting yourself with them and letting them draw off your attention from what may be coming. The stag will most probably be behind, and presently bring up the rear. Keep your eye therefore in the direction *they came from*, not in that whither they are going. That does not concern you. The stag may be some distance behind, but he is sure to follow in the wake of the hinds. Once near the Danube, and once in Suabia, towards the end of August I watched some hinds thus; but as it was not them I wanted, let them pass, watching them for a long time after they had gone by. In each case a good stag was behind, but as I was stupidly watching the others instead of expecting the stag, which I

ought to have known would most probably follow, I lost both. Indeed there is no act of carelessness or inexcusable foolishness as example of which I could not cite some deed of my own. But it is thus only, if we ever do get wiser, that we learn to do so.

I do not know what your individuality may be, Reader ;—you who now peruse this page. Not impossible you are what some call a dreamer, given to reverie ; willing to let your thoughts roam as they will, and to follow after them with your own mental self. If so, when standing in the forest surrounded by verdure, and repose, and beautiful tracery, and bursts of brightness, and flickering dappling shadows, you will have every inducement to lose yourself in sweet reverie, and to let minutes glide by in a state that is half reality, half dream. But sweetly tempting as it is, do not give way to it. The charmed stillness that pervades the spot induces to this : and Fancy will lure you away if she can. But listen to her some other time : *now* let all your senses be quickened and be wide awake, and give no place to other thoughts which may distract from the one end in view : “Where will the game come ?” Above all, do not fall a-thinking of a certain full yet slender form, and eyes that for you have always a kindly look. This, above all, do not do, or the deer will come and pass without arousing you from your pleasant musing. But perhaps you are no such fancy-weaver,

and dream only when your eyes are closed and you are asleep. I am not so, and am given to such phantasies. But it has often brought its punishment, yet never so directly — effect following quickly after cause — as in the chase.

After your shot, be careful to note what peculiar movement, what “sign” or evidence it gave of being hit. Should it not drop at once and you have to follow it, you may by such “sign” form an opinion where the bullet has struck, and act accordingly. Deer, for example, when wounded in the flanks, will suddenly stretch out spasmodically the hind leg. A shot in front, near the shoulder, and the animal will sometimes fall, sometimes bound, forwards. Though you may find no blood where the animal was standing, such movement if distinctly observable is quite as good a proof that it was struck; only you must take care not to confound a sudden start of alarm with the spasmodic movement caused by a shot-wound. Follow too with your eyes as long as you can, to see *how* it moves: if quickly or slowly, if limping or with difficulty, if it stop at intervals, if with head raised or bowed towards the earth. Mark all; let no peculiarity be lost.

If you have reason to think the animal is *severely* wounded,—and especially if in the flanks—do not follow it for an hour or so. Leave it quiet; it will soon lie down and you will get it all the more easily.

Whenever you follow a wounded animal, do so quietly. You will then not fright it from its lair before you are near, and you may thus come up within reach, and give the final shot. If noisy, it will rise to escape long before you approach.

Never send a hound in pursuit of a wounded animal, unless it is *badly* wounded, unless there is every chance of its being overtaken or brought to bay *speedily*. A hound hunting long disturbs the whole forest. The game is scared, and that grand essential of every chase, — the quiet — is sorely disturbed. A hind, or roe, or chamois with one leg disabled, a strong fleet hound will soon overtake and pull down. But for a hart or wild boar, which a hound alone can hardly master, a small dog, if his scent be good, is preferable. The wounded animal will sooner turn and stand at bay. Before a larger hound he will take to flight, but he will turn upon the smaller one, which, unable to attack, keeps up an incessant barking. Directed by the sound you hasten to the spot, and, while the animal is at bay, a shot from your rifle ends the strife.

Take note of some object near which the animal stood when you fired, so that you may be able to find the spot again easily and with exactitude, if required. It is often necessary to do so in order to know the relative position of the animal and yourself at that particular moment. Besides other reasons, you may also wish to

see what traces he left just there : see if your shot made him reel, and he stumbled, and then recovered himself ; marks of which momentary circumstance you may find left behind on the soft ground.

If you only get such view of an animal as to enable you to fire at it merely, but without giving it a good shot, — that is, one likely to prove mortal,— rather let it pass, and do not fire. To a true sportsman it is very unsatisfactory to give some fine head of game a bad shot, breaking a leg for instance, even though he obtain it at last by dint of exertion and long pursuit. And to wound an animal and not obtain it, is always cause for regret and self-reproach. The stag alluded to at page 82, that had taken up his abode on a ledge of the mountain, I once climbed up after, and waited for. Evidently suspecting danger he came creeping forth, bending low down, entirely hidden among the latschen. He approached thus quite near where I was sitting, and thrust out his nose from among the branches. Suddenly turning, he dashed off among the high bushes, and though I sprang to my feet, and with rifle at my shoulder followed him as he went,— for I could see his large spreading antlers waving above the boughs,— still I could not get a shot ; for I would not fire at random, and merely wound, perhaps, so fine a hart, without ever obtaining him.

If you are in the mountains, and in pursuit of

chamois, never fire at one which, from its position on the rocks, would in falling be dashed to pieces, or roll down into some abyss where it would be impossible to get it.

Should you fire at a stag or deer, and the animal drops to your shot, but still alive, and with head erect remains sitting on the ground or endeavouring to rise, make haste to fire a second time. The bullet has very probably struck high up, just grazing the spine; and it is this which, paralysing the limbs for a moment, caused him to drop so suddenly. If you wait or hesitate long, it will be on its legs again in a minute or two, and you will very probably never see it again. On such occasions there is nothing to debate about: a second bullet will make what is uncertain, sure. In the mountains, more especially, it is necessary to make sure; for when a wounded animal is to be pursued there, the difficulties increase a hundredfold.

In approaching a wounded chamois, be careful the sharply-pointed bent horns do not in any way get hooked into your leg, your stocking, or any part of your dress. They are very sharp, and as the animal struggles, do easily get thus fastened. Were it to happen when you are on a narrow ledge with a depth below, or on a very abruptly-steep slope, the consequences of such entanglement might prove fatal. Two years ago, Joseph Wrack, a keeper who has often been out with me, went

over to a chamois that a gentleman had wounded. He took the animal by the horns, and with knife in his right hand intended to despatch him. But the chamois struggled; and the place being very sloping, the animal slid downwards, and in doing so, hooked his sharp horns into Wrack's leg underneath the shin bone. Such a buck is heavy, and its weight pulled the man after it, and down they went together, sliding over the loose stones. Wrack, entwined as he was with the still living struggling animal, could not stop himself: the steepness of the declivity, and the loose stones, also made this difficult, and on they went, gliding and rolling, with every prospect of going into the depth below. Fortunately, however, the man was able to stop himself at last, and disengaging the buck from his hold, escaped thus his imminent danger.

A roebuck too, small as he is, will, if wounded, give you enough to do if you venture to approach him; and though unable to rise, he will, perhaps, as he struggles on the ground, give you, who are bending over and seizing him, good reason to repent your temerity. Be cautious, therefore.

A wounded stag as he lies on the earth can, though unable to rise, toss his head upwards. If you are *behind* his antlers, he may, with such movement, wound you fearfully. It is *in front* you must seize them, if you do so at all; though unless you know how to manage

it, it is rather difficult and dangerous work, at least single-handed.

In stalking you should have your eye *everywhere* and *at once*. You must see what is beside you, what is in front, and the ground also on which you are going to plant your foot at the next step. And this last is requisite in order to avoid striking against a stone, or slipping, or breaking a dead branch as you tread. But there are moments when your eye is fixed on one object in front, and you dare not lose sight of it for an instant. So you cannot look to see where to step. However, do not, particularly in coming down hill, put out the *front* part of your foot gropingly, *so as to step on your toes*, as you not unnaturally might do in order to be as quiet as possible; but rather, *with toes pointed upward, come down on your heel*. This has several advantages: they are these. With one foot thus heel-planted you stand much more firmly, much more steadily, than on your toes. With foot outstretched and pointed downwards seeking a resting-place you have much less command over yourself; for in this position all the muscles of the leg and thigh are not braced, but flaccid: whilst with heel stuck downwards they all are braced and firm. It is the same thing when on horseback. With toes pointed downward you have no *hold* whatever, you balance yourself merely: with your toes up and your heels down you sit as firmly as a rock. Again, the

edge of your heel covers less ground on coming in contact with it than the front part of your shoe, even though you tread on tip-toe. Having command over your limb, you can consequently let your foot slowly and gently descend till it is flat on the ground; and by this gradual descent and pressure you avoid all stumbling and noise, your foot feeling each obstacle beneath it as it slowly falls forward into its natural position on the earth.

If, when near, you see that the game has perceived you and gazes, it is useless to hope that its fears may be dispelled. But if you are some distance off, and it looks up and towards you, remain immovable, and in the very position you were when it became aware of your presence. No matter how uncomfortable that position be, remain in it, and motionless. You may have to do so for some time; but if the wind be good and no fresh accident occur to startle the animal, it will then probably go on grazing as before.

Though after reading these "Hints" of mine the young sportsman will undoubtedly still let escape him some head of game which he might have shot,—just as I have too often done,—yet, I think, by a warning beforehand, the number of such mischances may be lessened.

He will thus obtain his experience more cheaply than he otherwise would have to pay for it. He will soon make similar rules and observations for himself: meanwhile these may be found useful till personal experience has provided better ones in their stead.

THE END.

LONDON
PRINTED BY SPOTTISWOODE AND CO.
NEW-STREET SQUARE

BOOKS OF VOYAGES AND TRAVELS, WORKS ON NATURAL HISTORY, ETC.

THE COMPARATIVE ANATOMY and PHYSIOLOGY
of the VERTEBRATE ANIMALS. By RICHARD OWEN, F.R.S., D.C.L.,
Superintendent of the Natural History Department, British Museum; Fullerian Pro-
fessor of Physiology in the Royal Institution of Great Britain; Foreign Associate of
the Institute of France, &c. In One thick Volume, 8vo. with upwards of 1,200 En-
gravings on Wood.....[*In the press.*]

THE SEA and ITS LIVING WONDERS. By Dr.
GEORGE HARTWIG. Author of *The Life of the Tropics*. With several Hundred
Woodcuts, a Physical Map, and 12 Chromo-xylographs, from Designs by H. N.
HUMPHREYS. *Second Edition*.....8vo. 18s.

THE LIFE of the TROPICS: a Popular Scientific Account
of the Natural History of the Animal and Vegetable Kingdoms in Tropical
Regions. By Dr. GEORGE HARTWIG, Author of *The Sea and its Living Wonders*.
[*In preparation.*]

THE NATURAL HISTORY of CEYLON: comprising
Anecdotes illustrative of the Habits and Instincts of the Mammalia, Birds, Rep-
tiles, Fishes, Insects, &c., of the Island; also a Monograph of the Elephant, and a
Description of the Modes of Capturing and Training it. By Sir J. EMERSON
TENNENT, K.C.S., LL.D., &c. Re-published from "*An Account of Ceylon, &c.*"
with copious Additions, and new Illustrations from Original Drawings. Post
8vo.[*Nearly ready.*]

WILD LIFE on the FIELDS of NORWAY. By
FRANCIS M. WYNDHAM. With 5 Illustrations in Chromo-lithography, 2 Maps,
and 5 Woodcuts.....Post 8vo. 10s. 6d.

THE BISHOP of VICTORIA'S WORK, entitled *Ten*
Weeks in Japan. With a Map and 8 Illustrations in Chromo-xylography...8vo. 14s.

ALPINE BYWAYS; or, Light Leaves gathered in 1859
and 1860. By a LADY. With Illustrations in Chromo-lithography from Ori-
ginal Sketches, and 4 Route Maps Post 8vo. 10s. 6d.

THE ALPS; or, Sketches of Life and Nature in the Moun-
tains. By H. BERLEPSCH. Translated by the Rev. LESLIE STEPHEN, M.A.
Fellow and Tutor of Trinity Hall, Cambridge. 8vo. with 17 Illustrations from Original
Designs by Emil Rittmeyer.....[*Nearly ready.*]

**NARRATIVE of the CANADIAN RED RIVER EX-
PLORING EXPEDITION of 1857, and of the ASSINNIBOINE and SASKAT-
CHEWAN EXPLORING EXPEDITION of 1858.** By HENRY YOULE HIND, M.A.,
F.R.G.S., &c. With 20 Chromo-xylographs, 76 Woodcuts, 3 Maps, &c.. 2 vols. 8vo. 42s.

SEVEN YEARS' RESIDENCE in the GREAT DESERTS
of NORTH AMERICA. By the Abbé DOMENECH. With above Sixty
Illustrations.....2 vols. 8vo. 36s.

~~~~~

London: LONGMAN, GREEN, and CO. Paternoster Row.

*Voyages and Travels, Natural History, &c.*

---

**ANAHUAC** ; or, Mexico and the Mexicans, Ancient and Modern. By EDWARD B. TYLOR. Pp. 356 ; with Route Map, 4 Illustrations in Chromo-lithography, and 26 Engravings on Wood..... 8vo. 12s.

**A WEEK** at the LAND'S END. By J. T. BLIGHT, Author of "Ancient Crosses and other Antiquities of Cornwall." With a Map, geologically coloured, and 96 Illustrations drawn and engraved on the Wood by the Author ..... Square fcp. 8vo. 6s. 6d.

**GLENCREGGAN** ; or, a Highland Home in Cantire. By CUTHEBERT BEDE. With 3 Maps, 8 Illustrations in Chromo-lithography, and 61 Woodcuts from the Author's Drawings ..... 2 vols. post 8vo. 25s.

**TWO MONTHS** in the HIGHLANDS, ORCADIA, and SKYE. By CHARLES RICHARD WELD, Barrister-at-Law. With 8 Illustrations..... Post 8vo. 12s. 6d.

**THE AFRICANS** at HOME : being a popular Description of Africa and the Africans condensed from the Accounts of African Travellers from the time of Mungo Park to the Present Day. By the Rev. R. M. MACBRAIR, M.A. With a New Map and about 70 Woodcut Illustrations. . Square fcp. 8vo. 7s. 6d.

**THE LAKE REGIONS** of CENTRAL AFRICA. By R. F. BURTON, Captain H.M. Indian Army. Map and Illustrations. 2 vols. 8vo. 31s. 6d.

**PEAKS, PASSES, and GLACIERS.** By Members of the Alpine Club. Edited by JOHN BALL, M.R.I.A., President. Travellers' Edition, comprising the Mountain Expeditions and the Maps printed in a condensed form. 16mo. 5s. 6d.

\* \* The Fourth Edition of "Peaks, Passes, and Glaciers," with 8 coloured Illustrations, may still be had, in One Volume, square crown 8vo. price 21s.

**THE OLD GLACIERS** of NORTH WALES and SWITZERLAND. By A. C. RAMSAY, F.R.S. and G.S., Local Director of the Geological Survey of Great Britain. Reprinted from PEAKS, PASSES, AND GLACIERS ; with Map and Woodcuts ..... Fcp. 8vo. 4s. 6d.

**"THE EAGLE'S NEST"** in the Valley of Sixt : a Summer Home among the Alps. By ALFRED WILLS, Barrister-at-Law. *Second Edition.* With 12 Illustrations on Stone, and 2 Maps ..... Post 8vo. 12s. 6d.

**SOCIAL LIFE** and **MANNERS** in AUSTRALIA : Being the Notes of Eight Years' Experience. By a RESIDENT ..... Post 8vo. 5s.

**COLONIZATION** and **COLONIES** : Being a Series of Lectures delivered before the University of Oxford in 1839, 40, and 41. By HERMAN MERIVALE, M.A., Professor of Political Economy. Second Edition, with Notes and Additions..... 8vo. 18s.

---

London : LONGMAN, GREEN, and CO. Paternoster Row.







SMITHSONIAN INSTITUTION LIBRARIES



3 9088 01348 8549

